LTC 8900 Series

Security Systems

EN

User Manual

Allegiant® Microprocessor-based Video Switcher/Control Systems

CPU Firmware Version 10.0

BOSCH

Table of Contents

1 INTRODUCTION .3
2 THIS MANUAL .3
3 VIDEO MONITOR DISPLAY .4
3.1 Time / Date .4
3.2 Monitor Title/System Status Display .5
3.3 Monitor Message .6
3.4 Broadcast Message .6
3.5 Program Prompts .6
3.6 Camera Number .7
3.7 Camera Title .7
3.8 Video Loss Detection .7
4 USER INFORMATION .7
4.1 User Priority Access Table .8
5 KEYBOARD OPERATION .8
5.1 General .8
5.2 System Commands .8
5.3 Switcher Commands .9
5.4 Controlling Camera Movement .9
5.5 Alarm Commands .11
5.6 Sequence Control .12
5.7 Sequence Programming .13
6 KEYBOARD USER FUNCTIONS .14
6.1 General .14
7 MAINTENANCE .23
7.1 Cleaning the Keyboard .23
8 LTC 8900 CHARACTER SET .24
9 ERROR MESSAGES .31
10 GLOSSARY OF TERMS .33

1 INTRODUCTION

The LTC 8900 Allegiant Series is a video switching/controller system designed to handle up to 4096 cameras and 512 monitors, in a full crosspoint configuration. Although the LTC 8900 Series is a very sophisticated product, it has been designed with the novice user in mind. The system can be operated using its default configuration, or it can be customized using the PC-based software package.

The LTC 8900 Series Allegiant systems represent a dramatic breakthrough in CCTV switcher/controllers, and are backed by years of expertise in designing and manufacturing closed-circuit video equipment.

The LTC 8900 Series Allegiant system provides the following features:

1. Full camera switching/control on all monitors
2. Up to 120 keyboards
3. Up to 2048 alarm inputs
4. 3 user-selectable pre-defined alarm response modes
5. 64 priority levels for on-site receiver/driver control
6. SalvoSwitching®
7. 256 programmable sequences
8. Alarm call-up of pre-position scenes
9. RS-232 interface ports for Computer, Logging Printer, etc.
10. Keyboard Logon/Logoff security function
11. 128 Users with selectable password security
12. 16-character camera titles and 12-character monitor titles
13. User-selectable 40-character camera titles using 3rd line of on-screen text.
14. User-selectable 2-digit site plus 4-digit camera number mode.
15. Selectable time/date format
16. Local keyboard test function
17. Table and Sequence printout feature
18. Selectable RS-232 communication parameters
19. Integral video loss detection
20. Satellite system configurations
21. Restrictions for user/keyboard access to cameras
22. Restrictions for user/keyboard access to receiver/drivers
23. Restrictions for user access to keyboard
24. Restrictions for user/keyboard access to monitors
25. Programmable User names and ID numbers
26. Programmable zoned alarm call-ups
27. Advanced alarm features
28. Programmable camera numbers
29. Programmable receiver/driver functions on alarm
30. Programmable 128 Time Activated Events
31. Programmable receiver/driver functions in sequences
32. Monitor Broadcast messages
33. Alarm title designations
34. Personal Computer-based system diagnostics
35. Personal Computer-based system configuration

The LTC 8900 Series provides full control of on-site receiver/driver units, including the AutoDome® Series of integral pan/tilt/zoom dome cameras.

Add the LTC 8016/90 accessory unit to provide communication capability with Dinion® and AutoDome® cameras, using Bilinx™ technology.

2 THIS MANUAL

Each section in this manual covers one aspect of the system functions. System Operators should become familiar with the *Video Monitor Display* section, *User Information* section, *Keyboard Operation* section, and *Error Message* sections. System Administrators should become familiar with all operator sections, in addition to the sections on, *Keyboard User Functions*, and LTC 8900 CHARACTER SET table.

Typically, various system parameters are configured by the installer via the PC-based configuration software package at installation. These programmable options include entry of camera titles, user information, alarm functions, lockout tables, sequences, time events, and other operational functions. These programmable features have a great effect on system operation and operator privileges.

3 VIDEO MONITOR DISPLAY

The LTC 8900 Series systems feature an integral text overlay with two or three rows of 24 characters each. Over 4000 characters can be displayed. Refer to the *LTC 8900 CHARACTER SET* section for further details.

NOTE: If no video signal is present, a new line will appear stating: *VIDEO NOT PRESENT*.

The display is broken down into three areas as shown in the FIGURE 1 below:

3.1 Time / Date

The time/date display is generated by the system CPU microprocessor module. It is crystal controlled and battery protected for one year (minimum) without power. The display is updated once per second, and all monitors update simultaneously. The time/date message is always on the right-hand side of the video display, with the time on the top line. Time displays hours, minutes, and seconds, and can be set to either 12-hour or 24-hour operation. The date is available in three user-selectable formats:

1. U.S. Format: **MM/DD/YY**
2. International Format: **DD/MM/YY**
3. Asian Format: **YY/MM/DD**

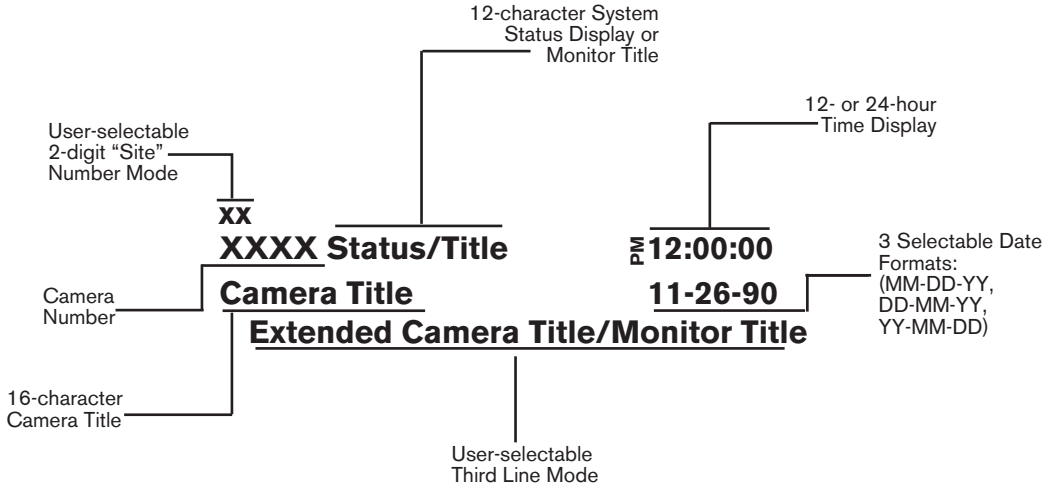


Figure 1 Monitor Overlay Display

3.2 Monitor Title/System Status Display

The monitor title/system status display area is a 12-column display to the right of the camera number. It is unique on each monitor, and has different uses, some of which may be user-selected via keyboard. These uses are described below:

Format of Monitor Overlay s

System Status Display

1	2	3	4	5	6	7	8	9	10	11	12
A	A	A	M	C	E	R	M	A	S	S	S
l	l	l	o	a	r	e	o	b	e	e	e
a	a	a	n	m	r	m	n	s	q	q	q
r	r	r			o			/			
m	m	m	A	A	r	L	L	R	N	N	S
			r	r	/	o	o	e	u	u	t
			m	m	D	c	c	l	m	m	a
					I	k	k				t
					R						

3.2.1 System Status Display

If this display is enabled (factory default), it allows the Allegiant system to dynamically inform the user of system status. The 12-column display is divided into smaller message columns (per above figure), in which special characters report the following:

Whether the switcher is running or stopped.

The switcher s direction.

Whether a monitor or remote camera is locked.

The alarm status of the camera and monitor.

3.2.2 Locations 1, 2, and 3 - Alarm Indication

When the monitor overlay is in *Status Display* mode, locations 1 through 3 indicate whether a camera on the monitor is in alarm. If the on-screen camera is currently in alarm, an *ALM* message in a box will flash at this location. A ** in a box means that a camera other than the on-screen camera is in alarm. If no cameras are currently in alarm on this monitor, these spaces are blank. When a monitor has cameras in alarm, press **NEXT**, **RUN**, or **PREVIOUS** on the keyboard to move through the alarm sequencer rather than the regular camera sequencer. The alarm switcher status will be displayed in location 6 using symbols described.

3.2.3 Location 4 - Monitor Arm Status Indication

In the MONITOR ARMED location, the characters S_M or D_M will appear if the monitor is armed for alarm. S_M means that the monitor is a *step* or *sequence* monitor, and will automatically step through multiple alarm videos. D_M indicates that the monitor is a *display* or *review* monitor, which will collect alarm videos from one or more step monitors.

When an alarm occurs, the alarmed camera s video will replace the current display of the monitor. If the monitor is not armed, this location is blank.

3.2.4 Location 5 - Camera Arm Status Indication

In the CAMERA ARMED location characters C_A are displayed if the camera being viewed is armed for alarm on that monitor. If the alarm signal associated with this camera becomes active, the camera will be displayed on the appropriate armed monitors.

3.2.5 Location 6 - Error Indication

This location displays ERR when a user error occurs. The specific error number appears in locations 7 and 8, and also in the *Camera Number Display* field on the keyboard. The display will return to normal after a few seconds, or if the user presses **ENTER** on the keyboard.

Location 6 is also used to indicate the sequencing direction when alarms occur. Possible character combinations are:

1. $\wedge_R$: the alarms are sequencing in a forward direction.
2. R_V: the alarms are sequencing in a reverse direction.
3. $\wedge_S$: the alarm sequencing has stopped, but if started again, would sequence in a forward direction.
4. S_V: the alarm sequencing has stopped, but if started again, would sequence in a reverse direction.

Location 6 can also be used to display a ◂▸ symbol indicating pan/tilt/zoom-equipped cameras. Using the PC-based Master Control Software or keyboard *User Functions 34* and *35*, controllable cameras can be individually configured to display a symbol in location 6 when viewed on a system monitor.

3.2.6 Location 7 - Remote Lock Indication

This location will display characters R_L to indicate that control over the movements of the camera being viewed have been *locked* by a user. Control over this camera is now possible only by the user who locked the camera, or has higher priority. If the camera is not locked, the icon is not displayed. If a user error has occurred, this location will temporarily hold part of the error number.

3.2.7 Location 8 - Monitor Lock Indication

This location will display characters M_L to indicate that the monitor has been *locked* by a user. The camera currently being viewed cannot be changed except by the user who locked the monitor, or has higher priority. If the monitor is not locked, the icon will not be displayed. If a user error has occurred, this location will temporarily hold part of the error number.

3.2.8 Location 9 - Sequence Type Indication

This location displays the type of sequence currently loaded on the monitor. An *absolute sequence* is indicated by the characters A_S, meaning that monitors programmed in the sequence program refer to the exact monitor(s) where the sequence may be run. Sequences created via the system keyboards are always of this type, so absolute sequences are the only type possible in a base system. *Relative sequences* are designated by the characters R_S in this location. These sequences will run on any monitor, or group of monitors, and can only be programmed via the Master Control Software on a PC.

3.2.9 Locations 10 and 11 - Sequence Number

The sequence number currently active for the monitor is displayed here. This is a number between 1 and 60, or 00 to indicate that no sequence is loaded.

3.2.10 Location 12 - Sequence Status Indication

This location indicates the status of the sequence active in the monitor. Possible character combinations are:

1. $\wedge_R$: the current sequence is sequencing in a forward direction.
2. R_V: the current sequence is sequencing in a reverse direction.
3. $\wedge_S$: the sequence is stopped, but if started again, would sequence in a forward direction.
4. S_V: the sequence is stopped, but if started again, would sequence in a reverse direction.

3.3 Monitor Title

The monitor message is a stationary 12-character title which may be placed on a monitor instead of the *System Status* display. Specific monitor messages can be programmed from either the keyboard (see *User Function 17* in SECTION 6) or the PC-based Master Control Software.

3.4 Broadcast Message

A message can be sent by the operator of the PC, via the PC-based Master Control Software, to all the monitors in the system. This message may be up to 24 characters, and can notify all users at all monitor locations of important information. The message, along with its beginning and ending time and date, is also printed on the logging printer (if one is connected), as well as any user acknowledgment. The broadcast duration may be set for 1 to 60 seconds, and is displayed on a line by itself.

3.5 Program Prompts

During entry of sequence programming via the keyboard, the Allegiant system prompts the user on the monitor his keyboard is currently controlling. The display will return to its previous form when the user leaves the *programming* mode.

3.6 Camera Number

The left-most display on the top line shows the system-generated camera number, and is always displayed. This unique number identifies this camera when using the keyboard for video call-ups. In base systems, this number is the same as the numbered BNC connector that the camera is plugged into on the rear of the bay (physical camera number). However, the PC-based Master Control Software package can be used to change this number to any unique number between 1 and 9999. The option to display a 2-digit site number above the 4-digit camera number is user-selectable. This "6-digit Camera ID" mode is especially useful when groups of cameras are located in separate buildings, floors, or other common areas.

3.7 Camera Title

The camera identification display (the first 16 characters of the lower line) is used to label each camera. Each camera has its own title, displayed whenever that camera is called up for viewing. A user selectable option provides the ability to display a 3rd line of on-screen text. This 3rd line can be configured to display up to 24 additional camera title characters (40 characters total) or a 12-character monitor title. The title characters can be entered from the keyboard via keyboard *User Function 9*, or via the PC-based Master Control Software.

3.8 Video Loss Detection

The Allegiant system is capable of detecting loss of video. When the unit detects that an input has lost video, a *VIDEO NOT PRESENT* message is displayed on the respective monitor.

NOTE: It may take up to five seconds for the unit to display the video loss message when a video source is disconnected.

4 USER INFORMATION

There are 64 levels of user priority in the Allegiant system. Each of the 128 users in the Allegiant system has a default priority level assignment. These user levels determine access to various system functions, and user control prioritization of monitors and pan/tilt/zoom-equipped camera sites. Generally, users with higher priority (highest = 1) can regain control over monitors or pan/tilt/zoom cameras *locked* by another user.

User Number	Default Password	Priority Level	Default Keyboard
1	1	1	1
2	2	2	2
3	3	2	3
4	4	2	4
5	5	64	5
6	6	64	6
7	7	64	7
8	8	2	8
9	9	2	9
10	10	2	10
11	11	2	11
12	12	2	12
13	13	2	13
14	14	2	14
15	15	2	15
16	16	2	16
17	17	2	17
18	18	2	18
19	19	2	19
20	20	2	20
21	21	64	21
22	22	64	22
23	23	64	23
24	24	64	24
(Continue Sequence)			
63	63	64	63
64	64	64	64
65	65	64	None
66	66	64	None
(Continue Sequence)			
127	127	64	None
128	128	64	None

The 64 priority level user assignments can be changed using the PC-based Master Control Software package, but for a base system, the table above shows the default values set. Note that in base systems where the login feature has not been selected, the first 64 user numbers are automatically associated with a specific keyboard port. This essentially sets the keyboard as the priority determiner. Also shown in the table are the default user passwords assigned to each user as the system is shipped from the factory. Once a user is logged-on to the system, the password can be changed via keyboard *User Function 10*. Refer to Section 6 *Keyboard User Functions*.

4.1 User Priority Access Table

The following table shows system function access for the 64 levels of users.

	Priority Levels		
System Function	1	2 to 7	8 to 64
Switch Video On Monitors	Yes	Yes	Yes
Control Pan/Tilt/Zoom Camera	Yes	Yes	Yes
Lock Monitor	Yes	Yes	Yes
Lock Pan/Tilt/Zoom Camera	Yes	Yes	Yes
Acknowledge Alarms	Yes	Yes	Yes
Perform Keyboard Test	Yes	Yes	Yes
Show Keyboard Number	Yes	Yes	Yes
Activate Keyboard Beeper	Yes	Yes	Yes
Change User Password	Yes	Yes	Yes
Program Sequences	Yes	Yes	No
Position Video Overlay Display	Yes	Yes	No
Set Overlay Display Brightness	Yes	Yes	No
Select Overlay Display Type	Yes	Yes	No
Set System Time/Date	Yes	Yes	No
Program Pre-positions	Yes	Yes	No
Set Time/Date Format	Yes	No	No
Set Camera and Monitor Titles	Yes	No	No
Enable Time Events	Yes	No	No
Enable 3-line Title Mode	Yes	No	No
Enable 6-digit Camera ID Mode	Yes	No	No
Enable Vertical Phase Set	Yes	No	No
Reset System	Yes	No	No
Printout Tables and Sequences	Yes	No	No
Default Monitor Overlay	Yes	No	No
Select Alarm Response Mode	Yes	No	No
Select Printer Mode	Yes	No	No
Designate Alarm Monitor Type	Yes	No	No
Select Keyboard Login	Yes	No	No
Select Console Login	Yes	No	No
Configure/Reset RS-232 Ports	Yes	No	No

5 KEYBOARD OPERATION

5.1 General

Primary operation of an Allegiant switcher is controlled via the system keyboard. The 2 types of keyboards available are:

Conventional LTC 8555 Series (incorporates LEDs and pushbuttons)

IntuiKey model (uses dynamic LCD menu screens)

General operation steps for both keyboard models follow. Refer to the User Manual provided with the keyboard for additional information.

As the system is supplied from the factory, various user-selectable features have been set to a default state. Since these features are user-selectable and can have a significant effect on the system operation, note any changes that may be in effect.

5.2 System Commands

5.2.1 Keyboard Login Procedure

Keyboard modes:

Via **Factory Default Settings**, a keyboard is ready for use as soon as power is applied to the system.

The system operator must logon to a keyboard to access the system. When a system is configured to use the keyboard logon, operators must be pre-assigned a user number and password. Up to 128 user numbers are available, each having default priority level. User specific priority levels can only be changed via the PC-based LTC 8059 Master Control Software (MCS) program. Refer to the MCS manual for details.

If the logon feature is enabled and an operator is not logged in, LED keyboards show flashing dashes in their display. IntuiKey keyboards prompt for a user number when entering the main Allegiant softscreen menu.

Enter your assigned user number via the numeric keypad and press **ENTER**. When prompted, enter the password. Invalid passwords cause the keyboard to revert to its initial state. Once the login is successful, the keyboard will show camera and monitor numbers in its display.

Upon logging in, the monitor controlled by the keyboard may automatically switch to a pre-assigned camera number. This function is only applicable if enabled by the system administrator (via the MCS package), and may not function if the monitor is running a sequence, and/or in an alarm condition.

NOTE: The information below applies to both IntuiKey keyboards and LTC 8555 Series keyboards. Where applicable, button designations specific to IntuiKey keyboards will be shown in plain text. Equivalent button designations that apply to LTC 8555 Series keyboards will be placed in [ ] immediately after the IntuiKey button text.

5.2.2 Keyboard Logoff Procedure

If the login feature has been enabled, press **User Logoff** [**User**, then **OFF**]. If the feature has not been enabled, this action is not applicable.

5.3 Switcher Commands

5.3.1 Camera Selection

The keyboard default mode is the camera mode, so enter a camera number for viewing, and press **ENTER**.

If the Allegiant is configured to operate in "6-digit Camera ID" mode, up to 6 digits can be entered. If the new camera is at the same "site" as the current camera, simply enter 1 to 4 camera number digits.
If the desired camera is at a different "site", 5 or 6 digits must be entered. The first and second digits would be the site number and the remaining 4 digits, including any leading zeros would be the camera number at that site.

5.3.2 Monitor Selection

Press **MON [Monitor]**, enter a monitor number, and press **ENTER**.

5.4 Controlling Camera Movement

5.4.1 General

Camera positioning is controlled via an eight-way joystick on the right-hand side of the keyboard. This joystick moves the camera pan/tilt, (if equipped), up, down, left, right, or diagonally. Rotate the joystick knob to control the zoom lens in or out.

Moving the joystick up and to the right, simultaneously, moves the camera in a diagonal direction. Rotating the ZOOM control knob causes the lens to either zoom in or out. The direction of its response depends on the camera/lens model, and certain system configuration settings determined at installation.

Up to four pan/tilt/zoom commands may be sent to a remote camera site at a time (Example - Zoom In, Focus Far, Pan Left, and Tilt Down). The three zoom lens functions can also be sent simultaneously (Example - Zoom Out, Focus Near, Iris Open).

5.4.2 Focus and Iris Lens Control

The lens control buttons are on the right-hand side of the keyboard. The camera's zoom lens, if equipped, can be controlled to focus near or far, and open or close the iris (if the lens supports manual iris operation).

5.4.3 Lock or Unlock Control of a Camera

When using IntuiKey keyboards, press **Device Lockout**, located on the main *Allegiant* menu, to enter a menu screen for these options.

With LTC 8555 Series Keyboards, press **Lock**, then **ON** to lock a camera, or **OFF** to unlock a camera. If the camera to be locked is not the one currently being viewed, enter the camera number via the numeric keyboard (but do not press **ENTER**) before pressing **Lock**.

If the *Status* option is enabled, the section of the on-screen overlay between the camera number and the time shows R_L, indicating the camera is locked. Activating a camera lock immediately prevents other operators (unless they have a higher priority) from controlling the locked pan/tilt/zoom camera. Remember to unlock the camera when finished so other operators can access it.

5.4.4 Lock or Unlock Control of a Monitor

When using IntuiKey keyboards, press **Device Lockout,** located on the main *Allegiant* menu, to enter a menu screen with these options.

With LTC 8555 Series keyboards, press **Monitor**, **Lock**, then **ON** to lock a monitor, or **OFF** to unlock the monitor. If the monitor to be unlocked is not the one currently being controlled by the keyboard, enter the monitor number (but do not press **ENTER**) after pressing **Monitor**.

If the *Status* option is enabled, the section of the on-screen overlay between the camera number and the time shows M_L, indicating the monitor is locked. This prevents other operators from changing the video on the monitor being used (unless they have a higher priority). Remember to unlock the monitor when finished so other operators can access it.

If an operator with a higher priority accesses a locked monitor and switches to a different camera, the lock is automatically removed.

5.4.5 Recording a Camera Pre-position Scene

Select a camera with pan/tilt/zoom control, with pre-position options. Using the joystick and lens controls, adjust the camera to view the scene to be stored. When using IntuiKey keyboards, press **Camera Control**, located on the main *Allegiant* menu screen to enter a menu screen with this option. Press **Set Shot [Set]**, then select the scene number via the numeric keypad, and press **ENTER**. The camera position will now be stored for recall later.

If an AutoDome Series camera is being used, certain pre-position commands are also used to activate operational features/functions. Refer to the AutoDome operation manual for complete information. If an Allegiant conventional receiver/driver is being controlled, the pan/tilt and zoom lens must have the necessary options for pre-position operation.

On certain models of AutoDomes and Allegiant Receiver/Driver Series, it is possible to disable a previously stored pre-position, or remove it from a pre-position tour, by pressing **Set Shot [Set]**, the digit 9, followed by the 2-digit pre-position number. Refer to information supplied with the device to determine if this feature is supported.

5.4.6 Recalling a Camera Pre-position Scene

Select the camera to be activated. Press **Shot**, enter a previously stored camera position number via the numeric keypad, then press **ENTER**. The camera automatically returns to the previously stored position. If a second pre-position is called prior to the completion of the first, the camera will move directly to the second shot. If the AutoDome Series camera is being used, certain pre-position commands are also used to activate operational features/functions. Refer to the AutoDome operation manual for information.

5.4.7 Activate/Deactivate Auxiliary Function

When using IntuiKey keyboards, press **Camera Control**, on the main *Allegiant* menu, to enter a menu containing this option. To turn on an *auxiliary* function of a remote camera device, press **Aux ON [ON]**, enter the number of the auxiliary to be activated, then press **ENTER**. Holding the **ENTER** key down causes the *auxiliary* function to be sent repeatedly. This capability is useful when the auxiliary is activating a housing window washer function, or a temporary light source.

To turn off an *auxiliary* function of a remote camera device, press **Aux OFF [OFF]**, enter the number of the auxiliary you wish to deactivate, then press **ENTER**.

With AutoDome Series cameras, auxiliary commands are used to activate/deactivate certain operational features/functions. Refer to the AutoDome camera manual for information on features supported by the model.

In the Allegiant Receiver/Driver Series, the first 4 auxiliaries correspond to relay outputs. Option switches in the receiver/driver can configure these to operate as either *latching* or *momentary* type functions. If configured for the *latching* type, the auxiliary will stay on once activated, until turned off. If configured as *momentary*, the auxiliary remains on only as long as the **ENTER** key is depressed. Auxiliary outputs 2 through 4 can also be configured as a contact closure, 24VAC, or as line voltage. Auxiliary number 5 controls the *DITHER* function, detailed below. Auxiliary number 6 corresponds to an internal receiver/driver *AUTOPANNING* feature, previously enabled by an option switch inside the receiver/driver.

DITHER is a legacy Allegiant receiver/driver feature designed to extend the life of tube-based low-light level cameras. Its function was to prevent bright lights in the scene from burning a spot on the camera imager. When this feature is active, and the pan/tilt is not moved for a period of about 2 minutes, the receiver/driver automatically pans right for approximately 0.5 seconds. Two minutes later, a pan left occurs, and the cycle continues until disabled. The feature is enabled by an option switch in the receiver/driver, and is controlled by the *auxiliary 5* function. To activate the *DITHER* function, turn on *auxiliary 5*; to deactivate, turn **OFF** *auxiliary 5*. When first enabled, the pan/tilt unit makes one short left/right cycle to indicate that the *DITHER* function has been activated. Note that a camera in the *DITHER* mode will accumulate a viewing error if left unattended for a long period of time, so occasionally a manual adjustment of the pan/tilt may be required.

5.5 Alarm Commands

5.5.1 Arm/Disarm Individual Alarms

Alarm commands control the system's automatic video switching capabilities, in response to alarm signals. When using IntuiKey keyboards, press **Alarm Control,** located on the main Allegiant menu, to enter a menu screen with these options. To arm an individual alarm on the monitor currently controlled by the IntuiKey, press **Arm Alarm**, enter alarm number to be armed via the numeric keypad, and press **ENTER**. To disarm an individual alarm when using the IntuiKey, press **Disarm Alarm**, enter the alarm number to be disarmed via the numeric keypad, and press **ENTER**.

To arm/disarm an individual alarm when using LTC 8555 Series keyboards, press **Alarm**, enter the alarm number to be armed via the numeric keypad, and press **ON** to arm the alarm, or **OFF** to disarm it.

Using default settings, the camera activated by an alarm is normally the same as the alarm number, although this relationship can be changed via the Allegiant PC-based MCS package. When the alarm number does not match the camera number, specify the alarm number when using this command.

The monitor status display (if enabled) shows C_A (camera/alarm armed) whenever an armed camera is selected.

5.5.2 Arm/Disarm All Alarms

Press **Alarm Control,** located on the main *Allegiant* menu to enter the menu screen containing these options.

When using the IntuiKey:

To arm all alarms on the monitor currently controlled, press **Arm All Alarms**.

To disarm all alarms, press **Disarm All Alarms**.

When using LTC 8555 Series keyboards:

To arm all alarms, press **User**, **Alarm**, and then **ON**.

To disarm all alarms, press **OFF**.

5.5.3 Arm/Disarm Monitor

When using IntuiKey keyboards:

Press **Alarm Control**, on the main *Allegiant* menu to enter the screen with these options.

To arm the monitor currently controlled, press **Arm Monitor**.

To disarm the monitor, press **Disarm Monitor**.

When using the LTC 8555 Series:

To arm the monitor, press **User**, **Monitor**,. then **ON** to arm all alarms.

To disarm all alarms, press **OFF**.

NOTE: Alarm video will appear on a monitor only if the monitor is armed and the alarm is armed for that monitor. The monitor status display (if enabled) will show M_A (monitor armed).

5.5.4 Alarms Acknowledgement

Bell [Ack] is provided so system operators can respond to alarms from the keyboard. Pressing **Bell [Ack]** while the keyboard is beeping (due to an alarm condition) always silences the beeper. Depending on alarm configuration programming, subsequent pressing of **Bell [Ack]** either clears alarm video from the monitors, or has no effect.

5.6 Sequence Control

5.6.1 Load/Clear a Sequence

To load a previously programmed sequence to run on your monitor, press **Load Sequence [Seq]**, enter the desired sequence number (1 to 256), then press **ENTER**. Note that loading a sequence does not automatically start the sequence.

Since sequences may be programmed to use more than one monitor, all required monitors must be available. If a sequence is already on a monitor, the originating operator (or an operator with a higher priority) can load a new sequence on the monitor(s). Others will receive an error message.

To clear a monitor sequence, press **Load sequence [Seq]**, then press **ENTER**. Only the originating operator (or an operator with a higher priority) can clear a monitor sequence. Others will receive an error message.

If enabled, the status display area of the monitor indicates the sequence number in the appropriate location. If no sequence is currently loaded, 00 is displayed.

5.6.2 Run a Sequence

To run a sequence currently loaded on a monitor, press **Start Sequence [Run]**. If the sequence was stopped, the command starts sequencing. Direction of the sequencing is indicated in the monitor status display (if enabled), by a directional arrow and the letter *R* to the right of the sequence number. If **Start Sequence [Run]** is pressed while a sequence is already running, the switcher goes immediately to the next step in the sequence. Holding down **Start Sequence [Run]** produces a *quick-scan* effect. If **Start Sequence [Run]** is depressed when no sequence is loaded, an error results. If the monitor is in alarm, **Start Sequence [Run]** controls switching of alarm video rather than a loaded sequence.

5.6.3 Stop a Running Sequence

To stop a sequence that is currently running, press **Hold Sequence [Hold]**. The monitor status display now shows *S* to the right of the sequence number. If the sequence is already stopped, pressing **Hold Sequence [Hold]** has no effect. If no sequence is currently loaded, pressing **Hold Sequence [Hold]** results in an error condition. If the monitor is in alarm, **Hold Sequence [Hold]** stops the alarm switcher rather than a loaded sequence.

5.6.4 Controlling Sequence Direction

The direction of a sequence can be set to either forward or reverse. It is also possible to manually step forward or reverse through a stopped sequence. These actions work as follows:

If **Next Sequence Step [Next]** is pressed with the sequence in the stop state, the sequence switches forward and remains stopped. If the sequence is running when **Next Sequence Step [Next]** is pressed, it immediately goes to the next step and continues to run. The same is true for the **Previous Sequence Step [Prev]** button, but in the reverse direction. If either **Next Sequence Step [Next]** or **Previous Sequence Step [Prev]** is held down, *quick-scan* switching will take place (at a rate of approximately two steps per second). When sequences are first loaded, direction defaults to forward.

If **Previous Sequence Step [Prev]** is pressed while a camera sequence is running, it reverses the sequence. If **Previous Sequence Step [Prev]** is pushed while in a *hold* mode, and the display is showing the forward prompt, the first push changes the direction only; a second push switches to the previous step. The same is true for **Next Sequence Step [Next]**, in the opposite direction. The monitor status display shows an arrow pointing either up/down to indicate the sequence direction. The arrow will be to the right of the sequence number, either above or below the sequence run *R* or stopped *S* indicator. If the monitor is in alarm, **Previous Sequence Step [Prev]** and **Next Sequence Step [Next]** control the alarm switcher rather than the loaded sequence.

If no sequence is loaded, pressing **Next Sequence Step [Next]** or **Previous Sequence Step [Prev]** automatically steps the switcher through the camera numbers in numerical order.

5.7 Sequence Programming

5.7.1 Programming a Simple Camera Sequence

The Allegiant system has very powerful sequencing capabilities. Using a system keyboard, it is possible to enter sequences to run on a single or multiple monitors. As long as valid camera and monitor numbers are used, they can be entered into a sequence randomly. More powerful features are available when sequences are programmed via the PC-based LTC 8059 MCS, including receiver/driver activation as part of a sequence step.

Sequence programming is only limited by the amount of CPU memory reserved for storing the sequence steps. The current limit for these Allegiant models is 6000 steps.

Comparing a sequence to a spreadsheet, a simple sequence would consist of 3 columns, as follows:

CAMERA	MONITOR	DWELL
1	1	2
2	1	2
3	1	2
4	1	2
5	1	2

Sequence programming is best described by going through the above example. To enter the *programming* mode, press **Program Sequence [Prog]**. Enter an available sequence number (1 to 256 for these Allegiant models), then press **ENTER**. The on-screen monitor display changes to the following format:

1st Line =	Site **	S0001	L0001	Time (Ignore)
2nd Line =	>C0001<	M001	D02	Date (Ignore)

** 2-digit site number is displayed only if 6-digit camera ID mode is enabled.

The top line of the display always indicates the current step being viewed in the *S0001* segment. The total length of the sequence is displayed in the *L0001* segment.

When programming a new sequence, the camera number that was being viewed before entering the *programming* mode is automatically placed between the >< prompts, as in *C0001* above. Now enter the 1st camera of the sequence into this position. If 6-digit camera ID mode is enabled, 5 or 6 digits must be entered. If the camera number is correct, no action is necessary. If not, enter the desired camera number via the keypad, and press **ENTER**.

Using the joystick, move RIGHT one step. The prompts will shift over to the monitor number (shown in the example as *M001)*. The monitor that was being controlled by the keyboard before entering the *programming* mode defaults to this position. If correct, no action is necessary; if not, enter the desired monitor number via the keypad, and press **ENTER**.

Move RIGHT again. The prompts now shift over to the dwell time (shown in the example as *D02)*. The default dwell time for a new sequence is always 2 seconds. If a different dwell period is desired, change the value to any number between 1 and 60. One line is now complete.

Press **Next Step [Next]** to add a second line. The camera number automatically increments, while the monitor number and dwell remain the same as the first line. Since this line is correct, no change is necessary, and **Next Step [Next]** may be pressed 3 more times until line 5 is reached. The joystick can be used to move around within the spreadsheet, but only the **Next Step [Next]** key can add new lines.

Continue entering camera, monitor, and dwell times in this fashion, until finished.

If you only want to store the sequence for future use and then exit the *programming* mode, press **Exit / Save [Prog]**. Press **Exit / Run [Run]** to exit the *programming* mode, store the sequence into memory, and start running the sequence. The switcher steps through the 5 steps in the order shown, and repeats the sequence when it reaches the last step. To program a sequence to run once through all of its steps and then stop, enter the value **62** for the dwell time in the last step and press **ENTER**. The dwell display will change to *STP*, meaning stop. To program a sequence to run once through all of its steps and then unload itself, enter the value **63** for the dwell time in the last step, and press **ENTER**. The dwell display will change to *ULD*, meaning unload.

To edit an existing sequence, press **Program Sequence [Prog]**, enter the existing sequence number, then press **ENTER**. You can insert a line into a sequence by navigating down to the line where inserting a new line, and press **Insert Step [ON]**. A new line identical to the one you are on is added to the next step. To delete a step, navigate to the line to be deleted, and press **Delete Current Step [OFF]**. To delete all steps below the line you are viewing, press **Delete From Here To End [Lock]**. (Be careful with this feature!)

To erase a sequence:
Press **Delete From Here To End [Lock]** while on the first line of the sequence. Then press **Delete Current Step [OFF]**. The sequence will be erased, and the *programming* mode is automatically exited.

5.7.2 Programming a SalvoSwitching Camera Sequence

A SalvoSwitching sequence can be used to switch a group of monitors simultaneously, as a synchronized group. To program a Salvo sequence, enter the *programming* mode as described above for a simple camera sequence. By definition, Salvo sequencing involves more than one monitor. An example of a simple Salvo sequence that switches cameras on three monitors simultaneously is shown below:

CAMERA	MONITOR	DWELL
1	1	SLV
2	2	SLV
3	3	2
7	1	SLV
8	2	SLV
9	3	2
21	1	SLV
22	3	SLV
23	3	2

In general, follow the instructions used for the simple camera sequence (described above), but instead of entering a number of seconds for steps that must switch instantly, enter **61** and press **ENTER**. This causes the switcher to automatically change to the salvo abbreviation *SLV*. Dwell time (in seconds) is entered only when you reach the step containing the last monitor to be switched within the synchronized group.

6 KEYBOARD USER FUNCTIONS

6.1 General

User functions are keyboard operations which are used infrequently, but provide important system options. These functions are listed below.

NOTE: Certain functions are restricted by user priority level. Information on user priority levels can be found in SECTION 4, USER INFORMATION. To execute these user functions, select the desired function, and follow the steps below.

For IntuiKey Keyboards:

1. From the main Allegiant screen, press **User Functions** (softkey).
2. Use **Previous** or **Next** to navigate to the desired function.
3. Press the desired softkey.

For LTC 8555 Series Keyboards:

1. Press **USER** and verify the indicator lights.
2. Using the numeric keypad, enter the desired user function number.
3. Press **ENTER**. Note that the keyboard camera display shows *F*, followed by the selected function number.
4. Follow the directions for the specific user function (described in its section, herein). In many cases, the joystick is used to select options.
5. Press **USER** to exit back to *normal* mode.

   EXAMPLE: **USER 2 ENTER**
   The above example accesses *User Function 2* as described in this section.

Fn#	Joystick Up/Down	Joystick Left/Right	Function Description	Access Level 1	2-7	8-64	Pass Req.
1	n/a	n/a	Local keyboard test	Y	Y	Y	
2	n/a	n/a	Show keyboard port number	Y	Y	Y	
3	n/a	n/a	Select keyboard beeper ON/OFF	Y	Y	Y	
4	Up/Down	Left/Right	Adjust position of monitor display	Y	Y	N	
5	Brightness	Msg vs. Stat	Monitor display brightness / status selection	Y	Y	N	
6	Time/Date ON/OFF	Overlay ON/OFF	Select monitor display option	Y	Y	N	
7	Set	Select	Set time	Y	Y	N	
8	Set	Select	Set date	Y	Y	N	
9	Set	Select	Set Camera ID	Y	N	N	
10	n/a	n/a	Change user password	Y	Y	Y	Y
11	Select	n/a	Select Time/date format	Y	N	N	
12	n/a	n/a	Default all monitor overlays	Y	N	N	
13	Select	n/a	Print configuration tables to system printer	Y	N	N	
14	n/a	n/a	Reserved				
15	n/a	n/a	Reset system	Y	N	N	Y
16	Select	Enable/Disable	Time Event Enable/Disable	Y	N	N	
17	Set	Select	Set Monitor ID	Y	N	N	
18	Select	n/a	Print Sequence	Y	N	N	
19	Select	n/a	Select alarm response	Y	N	N	Y
20	Select	n/a	Select printer verbosity	Y	N	N	
21	Select	n/a	Designate alarm monitor type	Y	N	N	Y
22	Select	n/a	Select control code format (fixed/variable)	Y	N	N	
23	n/a	n/a	Display CPU software version number	Y	Y	Y	
24	Up/Down	Left/Right	Set positions on all monitor displays	Y	Y	N	
25	Brightness	Msg vs. Stat	Set brightness on all monitor displays	Y	Y	N	
26	Time/Date	Overlay	Set display option on all monitors	Y	Y	N	
27	Keyboard Login	Select	Select keyboard login	Y	N	N	Y
28	Console Login	Select	Select console login	Y	N	N	Y
29	Default Parameters	Select	Default RS-232 Parameters	Y	N	N	Y
30	Controller Parameters	Select	Set Controller RS-232 Parameters	Y	N	N	Y
31	Console Parameters	Select	Set Console RS-232 Parameters	Y	N	N	Y
32	Alarm Parameters	Select	Set Alarm RS-232 Parameters	Y	N	N	Y
33	n/a	n/a	Display User Number and Priority	Y	Y	Y	
34	Select	n/a	Camera Indicator	Y	N	N	
35	Camera No.	Enable/Disable	Controllable Cameras	Y	N	N	
36	Select	Enable/Disable	Select Crosspoint Data	Y	N	N	
37	Select	n/a	R/D Addresses Mode	Y	N	N	
38	Select	n/a	Console Port Mode	Y	N	N	Y
39	Select	n/a	Select DIU Interface Port	Y	N	N	Y
40	n/a	n/a	Reserved				
41	Select	n/a	Set Satellite Communication Format	Y	N	N	Y
42	Select	n/a	Keyboard Login Auto-off Mode	Y	N	N	Y
43	n/a	n/a	CPU Battery Status	Y	Y	Y	
44	Select	n/a	Camera Vertical Phase Set	Y	N	N	Y
45	n/a	n/a	CPU Temperature Status	Y	Y	Y	
46	Select	n/a	Two/three Line Titles	Y	N	N	Y
47	Select	n/a	Six-digit Camera ID	Y	N	N	Y
99	Select	n/a	Use Functions Index	Y	Y	Y	

6.1.2 User Function 1 - Local Keyboard Test

User Function 1 can be used as a local test to ensure that all the keyboard LEDs and switches are working. This function automatically calibrates the center position of the analog joystick on LTC 8555 keyboards. Upon entering this test, the keyboard will beep and all LEDs will illuminate for about two seconds. Note if there are any LED failures.

Each key may be pressed to display a unique code number associated with that key. Follow the table below to ensure that all keys are being processed properly by the keyboard. Push **USER** last, as this causes the keyboard to exit the *test* mode. If the logon system feature has been selected by the system installer, the same local test may be initiated while the keyboard is not *ONLINE* by pressing ∗.

Key	No.	Key	No.
IRIS UP	044	CAMERA	024
IRIS DOWN	045	MONITOR	008
FOCUS UP	042	ACKNOWLEDGE	005
FOCUS DOWN	043	PROGRAM	002
ZOOM CLOCKWISE[1]	041	SET	001
ZOOM COUNTER[1]	040	SHOT	009
CLOCKWISE		OFF	025
ALARM	004	ON	017
USER	000	*	016
SEQUENCE	032	LOCK	003
HOLD	036	#7	012
RUN	033	#8	020
PREVIOUS	035	#9	028
NEXT	034	CLEAR	037
#1	010	#0	013
#2	018	ENTER[1]	029
#3	026	UP[1]	052
#4	011	RIGHT[1]	051
#5	019	DOWN[1]	050
#6	027	LEFT[1]	053

[1]Keyboard tests show a speed indicator value in the first digit position when performing pan, tilt, or zoom actions.

6.1.3 User Function 2 - Show Keyboard Port Number

User Function 2 may be used to identify which port a keyboard is plugged into. After entering *User Function 2*, read the keyboard port number from the monitor display on the keyboard. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.4 User Function 3 - Select Keyboard Beeper ON/OFF

When *User Function 3* is selected, the keyboard user may enable/disable the keyboard audio beeper. If using the LTC 8555 Series keyboard, press **ON** to enable the beeper, or **OFF** to disable it. Press **USER** to exit. Upon power-up of the keyboard, and whenever the Allegiant system undergoes a reset, this setting is **ON**.

6.1.5 User Function 4 - Adjust Position of Monitor Overlay

User Function 4 allows the characters on the video monitor display to be positioned from the keyboard. Only the display on the monitor that the keyboard is currently connected to is effected.

If using the LTC 8555 Series keyboard, use the joystick to position the display as required. Press **ENTER** to store the position, and then press **USER** to exit.

6.1.6 User Function 5 - Monitor Display Brightness / Status Selection

The white portion of the characters on the video monitor display may be made brighter or dimmer by the *User Function 5*. Only the display on the monitor that the keyboard is currently connected to is effected. After entering the mode, there are four possible settings. If using the LTC 8555 Series keyboard, moving the joystick up increases the brightness, and moving it down decreases the brightness.

User Function 5 also permits selection of either the *status* display or a 12-character *monitor message* to appear in the first line of the monitor display. The *status* display indicates alarm, sequence, and lockout information regarding the monitor. The *monitor message* is a stationary display, meaning the display will not change as video is switched from camera to camera on the monitor. After entering the mode, move the joystick left to select *monitor message* format, and right to select *status* format. If using the LTC 8555 Series keyboard, to exit the mode, press **USER**.

6.1.7 User Function 6 - Select Monitor Display Option

User Function 6 allows removal of the time and date (the left-hand side of the display), or the entire display from the individual monitor. If using the LTC 8555 Series keyboard, move the joystick down to blank the time and date from the screen. This is sometimes desirable when a VCR, with its own time and date, is being used. Move the joystick up to add the time and date back.

Move the joystick left to blank the left-hand side portion of the display from the monitor, and right to return it. Refer to *User Function 5* to verify brightness level. Press **USER** to exit the mode.

6.1.8 User Function 7 - Set Time

User Function 7 enables the operator to set the time displayed on all system monitors. After entering the mode, use the joystick to select hours, minutes, or seconds in an edit line (displayed on the monitor screen). If using the LTC 8555 Series keyboard, moving the joystick up/down counts the data item up/down; moving right/left selects between data items. **NEXT** is used to set the seconds to zero. If **NEXT** is pressed when the seconds are over 30, the minute count (shown on the operating clock display) is incremented. If **NEXT** is pressed when the seconds are under 30, the minutes are unaffected. Press **ENTER** to update the time displayed on all system monitors, and press **USER** to exit the mode.

6.1.9 User Function 8 - Set Date

User Function 8 enables the operator to set the date displayed on all system monitors. If using the LTC 8555 Series keyboard, the joystick is used to select the day, month, or year in an edit line (displayed on the monitor screen). Move the joystick up/down to count the data item up/down; move right/left to select between the data items. If using the LTC 8555 Series keyboard, press **ENTER** to update the date displayed on all system monitors, and press **USER** to exit the mode.

6.1.10 User Function 9 - Set Camera ID

User Function 9 permits entry of a 16-character camera identification message. This message appears on the video monitor display whenever the specific camera is called-up for viewing. If desired, this message can be used to identify the scene being viewed. Refer to SECTION 8, LTC 8900 CHARACTER SET for the available characters. After entering the mode, users with priority level 1 can use the joystick to move right/left to select the character to be changed. The selected character will be identified by a box with a question mark inside it. The first line of the video monitor screen indicates the code number of the character selected. Move the joystick up/down to step through the CHARACTER SET table, or enter the character s number (as identified in the tables) via the numeric keypad, and press **ENTER**. Once the title has been set, press **ENTER** to store it to memory. If using the LTC 8555 Series keyboard, press **USER** to exit the mode.

6.1.11 User Function 10 - Change USER Password

User Function 10 allows system access password change. This feature is only required in systems where the installer has enabled keyboard login and the password security feature. After entering the mode, the video monitor display prompts for the current password *OLD PASSWORD*. Enter the current user password via the numeric keypad, and press **ENTER**. If the system does not accept the old password, the system remains at this prompt. If the entered password is valid, the display changes to the *NEW PASSWORD* prompt for entry of a new password (up to 6 numerals) via the numeric keypad, then press **ENTER**. Leave this step blank if no password is desired. If none is used, at logon, press **ENTER** at the *P* prompt. To safeguard against typographical errors, the system prompts *VERIFY PASSWORD* requiring reentry of the new password. If the entered passwords do not agree, the system prompts for reentry and verification of the new password. If the two password entries agree, the video monitor prompt indicates *PASSWORD UPDATED*. Press **USER** to exit the mode.

6.1.12 User Function 11 - Select Time / Date Format

User Function 11 can be used by priority level 1 to select time and date format used throughout the system. Two (2) time formats available are; 12-hour mode and 24-hour mode. The date is available in **MM-DD-YY** format (U.S.), **DD-MM-YY** format (Int l), or **YY-MM-DD** format (Asian). After entering the mode, move the joystick up/down to select the desired format. If using the LTC 8555 Series keyboard, press **ENTER** to convert the system to the format chosen, then press **USER** to exit the mode.

6.1.13 User Function 12 - Default All Monitor Overlays

User Function 12 can be used by users with the priority level 1, to reset all monitor overlays to default characteristics (bottom center of screen), and full brightness. After entering the mode, press **ENTER** to reset all monitor overlays. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.14 User Function 13 - Print System Configuration Tables

Users with priority level 1 can use this function to print the contents of the tables programmed. Move the joystick up and down to select a table, then press **ENTER** to send it to the printer port. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.15 User Function 14 - Reserved Function

6.1.16 User Function 15 - System Reset

The system may be reset from the keyboard by users with priority level 1. After entering this mode, the video monitor screen indicates *RESET SYSTEM*. Enter the password via the numeric keypad, and press **ENTER**. The system will then reset. If using the LTC 8555 Series keyboard, press **USER** to exit the mode without resetting the system.

NOTE: The system should be reset whenever a change is made on the main CPU module s DIP switches.

Alternatively, the main power to the CPU bay may be switched off for 10 seconds, then restored. Depending on the size and complexity of the system, several seconds may elapse before operation is restored, due to the number of initialization tasks being performed. This is normal.

61.17 User Function 16 - Time Event Enable/Disable

Users with priority level 1 can use this function to enable or disable any of the programmed time event functions. Up to 128 time event functions can be programmed with the MCS software. Moving the joystick up/down steps through a table of the 128 time events. If an event has been programmed, moving the joystick to the right enables the event, and to the left disables it. The current status of an enabled time event is displayed by this user function.

6.1.18 User Function 17 - Set Monitor ID

User Function 17 can be used by users with the priority level 1, to enter a (12-character) monitor identification message for display in the top line of the monitor overlay display on any system monitor(s). This monitor title will be visible on the display regardless of the camera currently being viewed. This message can be used to identify the particular monitor or a group of cameras assigned to this monitor. Refer to SECTION 8, LTC 8900 CHARACTER SET, for the available characters. After entering the mode, the joystick is moved right/left to select the character to be changed. The selected character is identified by a box with a question mark inside. The first line of the video monitor display indicates the code number of the character selected. Move the joystick up/down to step through the CHARACTER SET table, or enter the character s number (identified in the Tables) via the numeric keypad, then press **ENTER**. Once the monitor title has been set, press **ENTER** to store it to memory. If using the LTC 8555 Series keyboard, press **USER** to exit the mode. The user may select between this monitor message and the status display by using the *User 5 Function* described above.

61.19 User Function 18 - Print Sequence

Use this function to print the contents of a programmed sequence. Users with priority level 1 can use the joystick to select the desired sequence, then press **ENTER** to print it to the printer port. Only those sequences currently existing in memory will be shown in the list. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.20 User Function 19 - Select Alarm Response

Users with the priority level 1 can use this function to reset the system alarm configuration tables to one of these predefined alarm response modes: *BASIC, AUTOBUILD, or SEQUENCE & DISPLAY*. Move the joystick up/down to select the desired mode, then enter your user password on the numeric keypad, and press **ENTER** to update the alarm system. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.21 User Function 20 - Select Printer Verbosity

Priority level 1 users can use this function to select between print modes; *Limited Printing* and *Full Printing*. This selection determines the amount of information printed during alarm processing. Both modes print alarm activation and deactivation messages, but *Full Printing* goes into much more detail. Use the joystick to select the desired mode, then press **ENTER**. If using the LTC 8555 Series keyboard, press **USER** to exit without changing the print mode.

6.1.22 User Function 21 - Designate Alarm Monitor Type

Priority level 1 users can use this function to designate the monitor currently controlled by the keyboard as either a STEP monitor or a REVIEW monitor. This function can only be used in the predefined *SEQUENCE & DISPLAY* alarm response mode to select which monitor is the STEP (also called SEQUENCE) monitor, and which is the REVIEW (also called DISPLAY or CONTROL) monitor. To designate a monitor as the STEP or REVIEW monitor, enter *User Function 21*, then move the joystick up/down to select the monitor type. Enter your password on the keyboard and press **ENTER**. If using the LTC 8555 Series keyboard, press **USER** to exit. After selecting new STEP and REVIEW monitors, the previous ones may be disarmed (see SECTION 5.5.3, Arm/Disarm Monitor instructions).

6.1.23 User Function 22 - Select Control Code Format

This function designates whether variable speed pan/tilt and zoom commands are enabled (Factory Default Setting). In most cases, there is no need to disable this function. If it becomes necessary to enable or disable variable speed operation, users with priority level 1 have this capability. Move the joystick up/down to select the desired setting, then press **ENTER**. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.24 User Function 23 - Display CPU Software Version Number

Users can use this function to display the revision number of the Allegiant s CPU software on the monitor screen.

6.1.25 User Function 24 - Set Positions on All Monitor Displays

This function is similar to *User Function 4,* except it changes the monitor display positions of all monitors in the system.

After entering *User Function 24*, use the joystick to position the display as required on the monitor controlled by the keyboard. Press **ENTER** to store and change all system monitor displays to this position. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.26 User Function 25 - Set Brightness on All Monitor Displays

This function is similar to *User Function 5,* except it changes the monitor display brightness of all monitors in the system.

The white portion of the characters on the video monitor displays may be made brighter or dimmer via the *User Function 25*. Move the joystick up to increase brightness, or down to decrease brightness. Once the display on the monitor that the keyboard is currently controlling is adjusted, press **ENTER** to change all system monitors to the same setting. Press **USER** to exit the mode.

The *User Function 25* mode can also select either the *status* display or a 12-character *monitor message* to appear in the first line of the monitor display. The *status* display indicates alarm, sequence, and lockout information regarding the monitor. The *monitor message* is a stationary display; the display will not change as video is switched from camera to camera on the monitor. After entering the mode, move the joystick to the left to select the *monitor message* format, or right to select the *status* format on the monitor that the keyboard is controlling. Press **ENTER** to change all system monitors to the same setting. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.27 User Function 26 - Set Display Option On All Monitors

This function is similar to *User Function 6,* except it selects the monitor display option of all monitors in the system. The *User Function 26* mode allows removal of the time and date, the left-hand side of the display, or to remove the entire display from the system monitors. Move the joystick down to blank the time and date from the screen. This is sometimes desirable when a DVR/VCR with its own time and date is being used. Move the joystick up to add the time and date back again.

Move the joystick to the left to blank the left-hand side of the display from the monitor and to the right to return it. Refer to *User Function 5 or 25* to verify brightness level. Press **ENTER** to update all system monitors to the selected format. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.28 User Function 27 - Select Keyboard Login

This function controls the system s keyboard login feature. Move the joystick up/down to select the mode for the system to function in. If the login feature is enabled (**MUST USE KBD PWD** is selected), the system keyboards require each user to login and logoff the system. All users are required to enter a user number and correct password to interact with the system. If the login feature is disabled (**NO KBD PWD LOGIN** is selected), system keyboards are always online with the system.

Once selection is made, exit the *User Function* mode and reset the system either via keyboard *User Function 15*, or by removing and restoring the main AC power to the system. Once the system has been reset, the *keyboard login* function will be active and all system keyboards must be logged in to access the system.

6.1.29 User Function 28 - Select Console Login

This function controls the system s external *Console port login* feature. After entering the mode, move the joystick up/down to select the mode in which the system should function. If the login feature is enabled (**MUST USE CON PWD** is selected), any external PC or other computing device must login to communicate with the system. External computing devices are required to enter a user number and correct password. If the *Console login* feature is disabled (**NO CON PWD LOGIN** is selected), the Console port is available for communication.

Once the selection is made, exit the *User Function* mode and reset the system, either via keyboard *User Function 15*, or by removing and restoring the main AC power to the system. Once the system has been reset, the *Console login* function is active, and all external computing devices must login to access the system.

6.1.30 User Function 29 - Reset RS-232 Parameters to Default

This function returns the system s external RS-232 ports to a known default state. After entering the mode, enter a valid password. The system will reset after placing the RS-232 protocols back to the default state.

6.1.31 User Function 30 - Set Controller RS-232 Parameters

Priority level 1 users can select the RS-232 baud rate and handshake options for the system s Controller port via this function. Upon entry to this mode, the current settings are displayed. Move the joystick up/down to select the baud rate, and left/right to select the handshake option. After being changed, the port is also automatically set to eight data bits, no parity, and one stop bit. Once new settings have been selected, enter the user password and press **ENTER**. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.32 User Function 31 - Set Console RS-232 Parameters

Priority level 1 users can select the RS-232 baud rate and handshake options for the LTC 8900 system s Console port via this function. Upon entry to the mode, the current settings are displayed. Move the joystick up/down to select the baud rate, and left/right to select the handshake option. After being changed, the port is also automatically set to eight data bits, no parity, and one stop bit. Once new settings have been selected, enter the user password and press **ENTER**. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.33 User Function 32 - Set Alarm RS-232 Parameters

Priority level 1 users can select the RS-232 baud rate and handshake options for the LTC 8900 system s Alarm port via this function. Upon entry to the mode, the current settings are displayed. Move the joystick up/down to select the baud rate, and left/right to select the handshake option. After being changed, the port is also automatically set to eight data bits, no parity, and one stop bit. Once new settings have been selected, enter the user password and press **ENTER**. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.34 User Function 33 - Display User Number and Priority

This function displays the current user s number and priority level on the monitor screen. The user number will be displayed on the top line and the user s priority level will be displayed on the bottom line of the monitor screen. If using the LTC 8555 Series keyboard, press **USER** to exit.

6.1.35 User Function 34 - Camera Indicator

Priority 1 users can use this function to enable an on-screen indicator to identify a pan/tilt equipped camera. Move the joystick up/down to select **DISP CAM CONTROL** or **NO CAM CONTL DISPL**. Press **ENTER** to activate your selection. When enabled, cameras identified as controllable (via *User Function 35* or the PC software package), show a ⌂ in the middle of the first line of monitor text.

6.1.36 User Function 35 - Controllable Cameras

Priority 1 users can use this function to select camera sites equipped with pan/tilt devices. Move the joystick up/down to select the camera number, and left/right to select **FIXED** or **MOVABLE**. *User Function 34* or the optional PC software package enables or disables the display of the controllable camera indicators on the system monitor displays.

6.1.37 User Function 36 - Select Crosspoint Data

Priority 1 users can use this function to select options for accessory device data that can be sent out the biphase control port. Move the joystick up/down to select **XPOINT DATA**, **ALARM XPOINT**, or **PHYSICAL CAMERA NUMBER**, and left/right to enable/disable the selected option. These options need only be enabled when Switcher Follower accessory devices are used in the system.

6.1.38 User Function 37 - R/D Address Mode

Priority 1 users can use this function to select whether the biphase control data commands will be addressed using the cameras *logical* numbers or physical indexes in the camera table. Move the joystick up/down to select **LOGICAL** or **PHYSICAL** and press **ENTER** to activate your selection. If this option is set to **LOGICAL**, receiver/drivers should be addressed using the cameras logical identification number. If it is set to **PHYSICAL**, receiver/drivers should be addressed using the cameras physical number.

6.1.39 User Function 38 - Console Port Mode

This function allows configuration of the system s console port, for use with a Console Port Expander accessory device. Priority 1 users can move the joystick up/down to select the console port function; NORMAL or EXPANDED. Press **ENTER** to activate your selection. You must reset the system for this setting to take effect.

6.1.40 User Function 39 Select DIU Interface Port

Priority 1 users can use this function to select the switcher s interface port to be connected to an external Allegiant Bilinx™ Data Interface accessory unit. Move the joystick up/down until the desired port for use as a data interface (DIU) is displayed. Press **ENTER** to configure the port. If using the LTC 8555 keyboard, press **USER** to exit the mode.

6.1.41 User Function 40 - Reserved Function

6.1.42 User Function 41 Set Satellite Communication Format

This function provides three (3) configuration options that determine the behavior and content of the data commands issued by a master system to a satellite system. In most cases, it is only necessary to change the default setting if using a multi-level cascaded Allegiant satellite system configuration. (Refer to Appendix section for more information on Satellite system configurations.) Detailed descriptions of these options are listed below.

After entering the mode, move the joystick up or down to select the desired option. Enter a valid user password, and press [Enter].

a) "CACHE REM CAM" option (default factory setting). In this mode, satellite commands are issued repetitively, regardless of whether the satellite camera is still being viewed by an operator. This mode of operation is more desirable in standard systems because it minimizes delays when previous Satellite cameras are reselected. It is not recommended for use in cascaded systems. In cascaded systems, this mode could result in all available Trunk Lines coming from the 3rd level satellite system to become used up, making them unavailable to the operators at the intermediate system.

b) "NO REM CAM CACHE" option. In this mode, after the top level operator selects a locally connected camera, the Trunk Line between the top level and the intermediate level system will immediately be reset to its Start-up camera (as defined in the Monitor table of the LTC 8059/00 Master Control Software). This in turn frees up the Trunk Line between the intermediate level system and the 3rd level system so it will be available if needed by an operator at the intermediate level system.

In addition, this option changes the behavior of how the system determines which Trunk Line to use. When this option is not used, a new Trunk Line (if available) will be used for each camera selection. When this option is enabled, an operator's monitor will use the same Trunk from the same bay as different cameras are selected, as long as no other operator is viewing the same Satellite camera. In 3-tier cascaded Satellite systems, this feature minimizes the use of Trunk Lines by the top level Master system. This is especially advantageous when the operator at the Master site is viewing cameras from the 3rd level Satellite. Since this will result in less Trunk Lines being used up, the intermediate Master/Satellite system will have more access to Trunk Lines from the 3rd level Satellite.

c) "SAT nnn PRIORITY" option. If the top level master system and intermediate level system in a cascade configuration can or will be set to operate as "Dual Master" systems, a priority based satellite camera selection feature can be configured. In a default cascaded satellite system configuration, satellite switching commands are not associated with a user priority level. When a switching command sent from a master site is received by a satellite, the switch selection can immediately be overridden by operators at the satellite location having any priority level. This situation is more likely to be encountered in 3-tier Satellite systems that do not have a good distribution of trunk lines (i.e., more between the top level system and the intermediate level system than there are between the intermediate system and the 3rd tier satellite).

Since dual master configurations support bi-directional communications, selecting the "SAT nnn PRIORITY" option for both the top level and intermediate level master systems will result in the generation of priority based satellite commands.

The Satellite number assigned to the system that is currently being programmed must be specified for the "nnn" value. This feature will enable use of the operator s user priority to determine if access to a desired satellite camera is provided or not. For instance, if no Trunk Lines are available and an operator requesting a satellite camera has higher priority than at least 1 of the existing operators, the requested camera will be switched. If the operator does not have sufficient priority, they will receive an error message (i.e., error 81) via the satellite communication path, and their camera will switch to the Start-up camera specified in the Monitor table.

In addition, the same behavior for selecting Trunk Lines as described in the "NO REM CAM CACHE" option is applicable to this option. An operator's monitor will use the same Trunk from the same bay as different cameras are selected, as long as no other operator is viewing the same Satellite camera.

6.1.43 User Function 42 Keyboard Login Auto-off Mode

Priority 1 users can use this function to select a keyboard logoff feature to automatically log a keyboard off after a preselected time of inactivity. After entering the mode, move the joystick up/down to select the desired time period. Enter a valid password, and press **ENTER**. If using the LTC 8555 keyboard, press **USER** to exit the mode.

6.1.44 User Function 43 CPU Battery Status

Use this function to view the condition of the batteries used to backup CPU memory. Once the function is entered, the condition is displayed on the monitor text display. If using the LTC 8555 keyboard, press **USER** to exit the mode.

User Function 44 Camera Vertical Phase Set

NOTE: This feature requires the following:

a) LTC 8621 or LTC 8821 video input modules having firmware 5.30 or later.

b) Dinion series of cameras using Bilinx communications.

c) AutoDome series of cameras using either Bilinx or Biphase data communications.

d) LTC 8016/90 Bilinx Data Interface unit having firmware 1.01 or later.

e) All cameras configured to use Line Lock mode.

Priority 1 users can use this function to automatically adjust the phase interval delay of compatible cameras connected to the system. This will result in roll-free switching as the cameras are manually selected or automatically sequenced on system monitors.

After entering the function, the joystick down/up is used to select either an individual camera to adjust or all cameras. Enter a valid user password number and press **ENTER** to activate the adjustment process.

Some minor disturbance of the video images may be visible for 1 or 2 seconds while the cameras are being adjusted. If no changes are noticed, check to make sure that you have compatible devices in your system.

If using an LTC 8555 keyboard, press **USER** to exit the mode.

User Function 45 CPU Temperature Status

Use this function to view the condition of the CPU temperature. Once the function is entered, the condition is displayed on the monitor text display.

If using the LTC 8555 keyboard, press **USER** to exit the mode.

User Function 46 - Two/Three Line Titles

Use this function to enable a third line of on-screen text. This new line can be used to display up to 24 additional camera title characters, providing a total of 40 characters (or 20 'double width' characters) for each camera. Alternatively, this line can be used to display the 12-character Monitor title.

Once the function is entered, move the joystick up/down to select the desired option. Enter a valid user password, and press [Enter]. The on-screen display of some system monitors may take up to 1 minute before changing.

After enabling/disabling this feature, it is recommended to enter User Function 24 (see above) to adjust vertical height of the on-screen text to the desired position.

NOTE: At time of this publication, the available version of the PC-based LTC 8059 Master Control Software only supports user programming of the standard 16 characters of the camera titles. The additional 24 characters can only be programmed using User Function 9 (see above) or via third party RS-232 serial interface utilizing the Allegiant Command Console Language (CCL) commands.

User Function 47 - Six-digit Camera ID

Use this function to enable/disable "6-digit Camera ID" mode. When enabled, 2-digit "site numbers" are displayed in addition to the 4-digit camera number. The 2-digit site number feature is especially useful when groups of cameras are located in separate buildings, floors, or other common areas.

By default, all 6-digit camera numbers are assigned to site "00" and the remaining digits correspond to the standard 4-digit camera numbers. Use the PC-based LTC 8059 Master Control Software to enter unique 6-digit camera numbers for each system camera. When enabled, all keyboard based camera selections and Sequence programming must be done using the 6-digit number.

Once the function is entered, move the joystick up/down to select the desired option. Enter a valid user password, and press [Enter]. The on-screen display of some system monitors may take up to 1 minute before changing.

NOTE: This feature requires firmware versions released for certain system components in March 2009. If necessary, compare firmware versions against the list of components below to determine if the feature is available in your system:

COMPONENT	Firmware Version
LTC 8x10/01 Series CPU/Data Receiver modules	10.05 or later
Intuikey keyboard firmware	1.93 or later
LTC 8555 keyboard firmware	5.90 or later
LTC 8934/00 Video Output Module	8.02
LTC 8059/00 Master Control Software	2.90

6.1.45 User Function 99 - User Function Index

This function is an index listing of all *Keyboard User Functions*. Move the joystick up/down to view an abbreviated description of the function number currently shown in the first line of the monitor display.

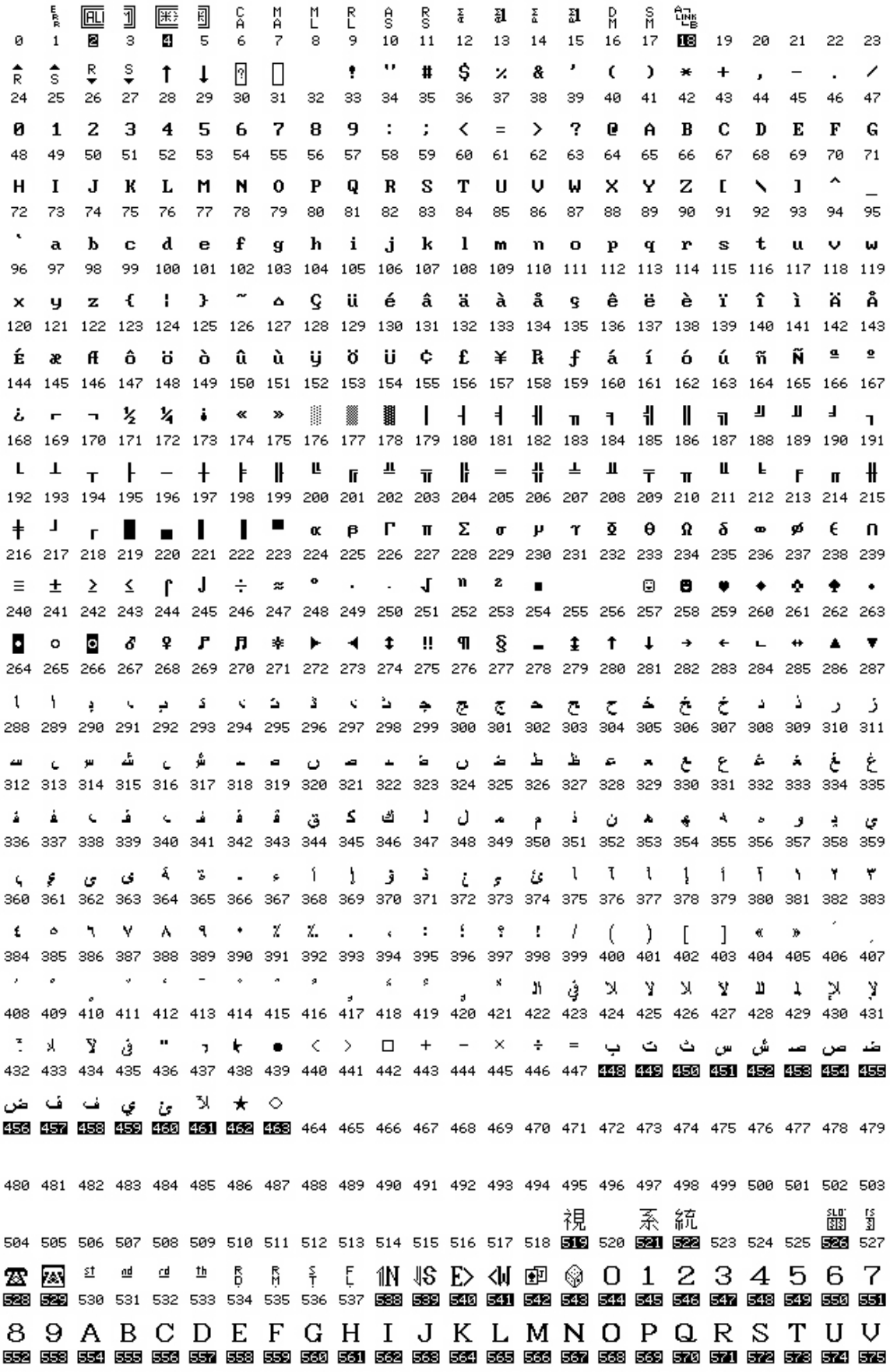
7 MAINTENANCE

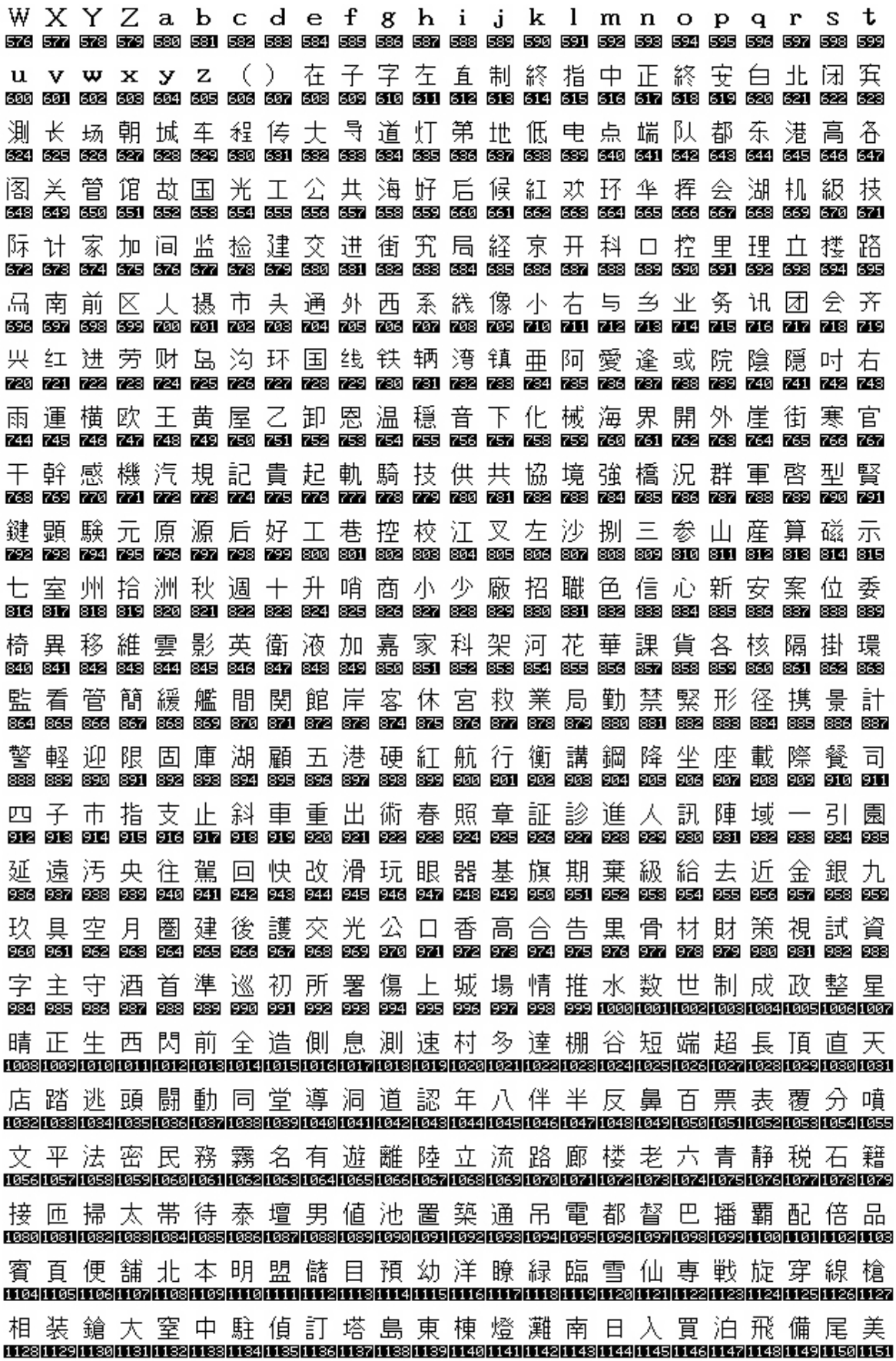
THE ALLEGIANT SYSTEM IS DESIGNED TO PERFORM FOR LONG PERIODS OF TIME WITH LITTLE OR NO MAINTENANCE. OCCASIONALLY, KEYBOARD CLEANING MAY BE NECESSARY. SEE BELOW INSTRUCTIONS.

7.1 Cleaning the Keyboard

The keyboard may be cleaned when necessary, by temporarily removing it from the system and wiping it with a damp cloth. If a conventional spray cleaner is required, spray the cloth first, then wipe off the surfaces. Do not use petroleum-based cleaners or those containing benzene, triclorethylene, ammonia or acetone, which could damage plastic surfaces.

8 LTC 8900 CHARACTER SET




W X Y Z a b c d e f g h i j k l m n o p q r s t
576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599
u v w x y z ( ) 在 子 字 左 直 制 終 指 中 正 終 安 白 北 闭 宾
600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623
测 长 场 朝 城 车 程 传 大 导 道 灯 第 地 低 电 点 端 队 都 东 港 高 各
624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647
阁 关 管 馆 故 国 光 工 公 共 海 好 后 候 紅 欢 环 华 挥 会 湖 机 級 技
648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671
际 计 家 加 间 监 检 建 交 进 街 究 局 経 京 开 科 口 控 里 理 立 楼 路
672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695
品 南 前 区 人 摄 市 头 通 外 西 系 线 像 小 右 与 乡 业 务 讯 团 会 齐
696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719
兴 红 进 劳 财 岛 沟 环 国 线 铁 辆 湾 镇 亚 阿 愛 逢 或 院 陰 隐 吋 右
720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743
雨 運 横 欧 王 黄 屋 乙 卸 恩 温 穏 音 下 化 械 海 界 開 外 崖 街 寒 官
744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767
干 幹 感 機 汽 規 記 貴 起 軌 騎 技 供 共 協 境 強 橋 況 群 軍 啓 型 賢
768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791
鍵 顕 験 元 原 源 后 好 工 巷 控 校 江 叉 左 沙 捌 三 参 山 産 算 磁 示
792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815
七 室 州 拾 洲 秋 週 十 升 哨 商 小 少 廠 招 職 色 信 心 新 安 案 位 委
816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839
椅 異 移 維 雲 影 英 衛 液 加 嘉 家 科 架 河 花 華 課 貨 各 核 隔 掛 環
840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863
監 看 管 簡 緩 艦 間 関 館 岸 客 休 宮 救 業 局 勤 禁 緊 形 径 携 景 計
864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887
警 軽 迎 限 固 庫 湖 顧 五 港 硬 紅 航 行 衡 講 鋼 降 坐 座 載 際 餐 司
888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911
四 子 市 指 支 止 斜 車 重 出 術 春 照 章 証 診 進 人 訊 陣 域 一 引 園
912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935
延 遠 汚 央 往 駕 回 快 改 滑 玩 眼 器 基 旗 期 葉 級 給 去 近 金 銀 九
936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959
玖 具 空 月 圏 建 後 護 交 光 公 口 香 高 合 告 黒 骨 材 財 策 視 試 資
960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983
字 主 守 酒 首 準 巡 初 所 署 傷 上 城 場 情 推 水 数 世 制 成 政 整 星
984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007
晴 正 生 西 閃 前 全 造 側 息 測 速 村 多 達 棚 谷 短 端 超 長 頂 直 天
1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031
店 踏 逃 頭 闘 動 同 堂 導 洞 道 認 年 八 伴 半 反 鼻 百 票 表 覆 分 噴
1032 1033 1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047 1048 1049 1050 1051 1052 1053 1054 1055
文 平 法 密 民 務 霧 名 有 遊 離 陸 立 流 路 廊 楼 老 六 青 静 税 石 籍
1056 1057 1058 1059 1060 1061 1062 1063 1064 1065 1066 1067 1068 1069 1070 1071 1072 1073 1074 1075 1076 1077 1078 1079
接 匝 掃 太 帯 待 泰 壇 男 値 池 置 築 通 吊 電 都 督 巴 播 覇 配 倍 品
1080 1081 1082 1083 1084 1085 1086 1087 1088 1089 1090 1091 1092 1093 1094 1095 1096 1097 1098 1099 1100 1101 1102 1103
賓 頁 便 舗 北 本 明 盟 儲 目 預 幼 洋 瞭 緑 臨 雪 仙 専 戦 旋 穿 線 槍
1104 1105 1106 1107 1108 1109 1110 1111 1112 1113 1114 1115 1116 1117 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127
相 装 鎗 大 窒 中 駐 偵 訂 塔 島 東 棟 燈 灘 南 日 入 買 泊 飛 備 尾 美
1128 1129 1130 1131 1132 1133 1134 1135 1136 1137 1138 1139 1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151

腐 阜 武 部 風 副 歩 輔 包 報 峯 門 欄 零 裂 聯 一 七 九 二 人 入 八 十
1152 1153 1154 1155 1156 1157 1158 1159 1160 1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 1172 1173 1174 1175

三 口 土 大 女 小 山 川 工 中 之 井 五 仁 元 六 公 分 卅 尺 心 手 方 日
1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199

月 火 片 王 丙 丘 主 仙 出 凸 功 北 仟 可 右 叫 台 四 外 左 市 平 民 甲
1200 1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221 1222 1223

白 石 立 交 企 危 向 后 地 年 收 兵 即 坊 坑 壮 宏 局 岐 志 李 村 歩 系
1224 1225 1226 1227 1228 1229 1230 1231 1232 1233 1234 1235 1236 1237 1238 1239 1240 1241 1242 1243 1244 1245 1246 1247

肖 邦 里 防 佰 兩 和 周 坡 定 宜 岸 店 往 房 放 昌 板 河 金 南 威 度 急
1248 1249 1250 1251 1252 1253 1254 1255 1256 1257 1258 1259 1260 1261 1262 1263 1264 1265 1266 1267 1268 1269 1270 1271

政 星 昱 査 柒 段 泉 省 紅 背 郊 剛 峰 旁 旅 桂 氣 浪 班 珠 矩 站 停 區
1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290 1291 1292 1293 1294 1295

商 售 國 將 崖 排 晚 清 組 船 處 設 責 途 部 鳥 勞 博 堡 廊 廂 景 氮 湖
1296 1297 1298 1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316 1317 1318 1319

程 窗 絶 註 象 貳 隊 黃 黑 圓 塞 厦 敬 溝 煤 當 矮 萬 置 罩 肆 運 遂 鉛
1320 1321 1322 1323 1324 1325 1326 1327 1328 1329 1330 1331 1332 1333 1334 1335 1336 1337 1338 1339 1340 1341 1342 1343

電 團 圖 漢 福 精 臺 領 層 廣 廠 輛 器 應 總 檯 舊 轉 攝 聽 觀 庄
1344 1345 1346 1347 1348 1349 1350 1351 1352 1353 1354 1355 1356 1357 1358 1359 1360 1361 1362 1363 1364 1365 1366 1367

1368 1369 1370 1371 1372 1373 1374 1375 1376 1377 1378 1379 1380 1381 1382 1383 1384 1385 1386 1387 1388 1389 1390 1391

1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415

1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428 1429 1430 1431 1432 1433 1434 1435 1436 1437 1438 1439

1728 1729 1730 1731 1732 1733 1734 1735 1736 1737 1738 1739 1740 1741 1742 1743 1744 1745 1746 1747 1748 1749 1750 1751

א ב ג ד ה ו ז ח ט י ך כ ל ם מ ן נ ס ע ף פ ץ צ ק
1752 1753 1754 1755 1756 1757 1758 1759 1760 1761 1762 1763 1764 1765 1766 1767 1768 1769 1770 1771 1772 1773 1774 1775

ר ש ת
1776 1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799

1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822 1823

А Б В Г Д Е Ё Ж З И Й К Л М Н О П Р С Т У Ф Х Ц
1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845 1846 1847

Ч Ш Щ Ъ Ы Ь Э Ю Я Є Ї І Ґ Ђ Ћ Џ Ј Љ Њ Ѕ Ѵ 1 2 3
1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871

4 5 6 7 8 9 0 £ $ % . , : ; ‘ ’ ? ! / ( ) [ ] *
1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895

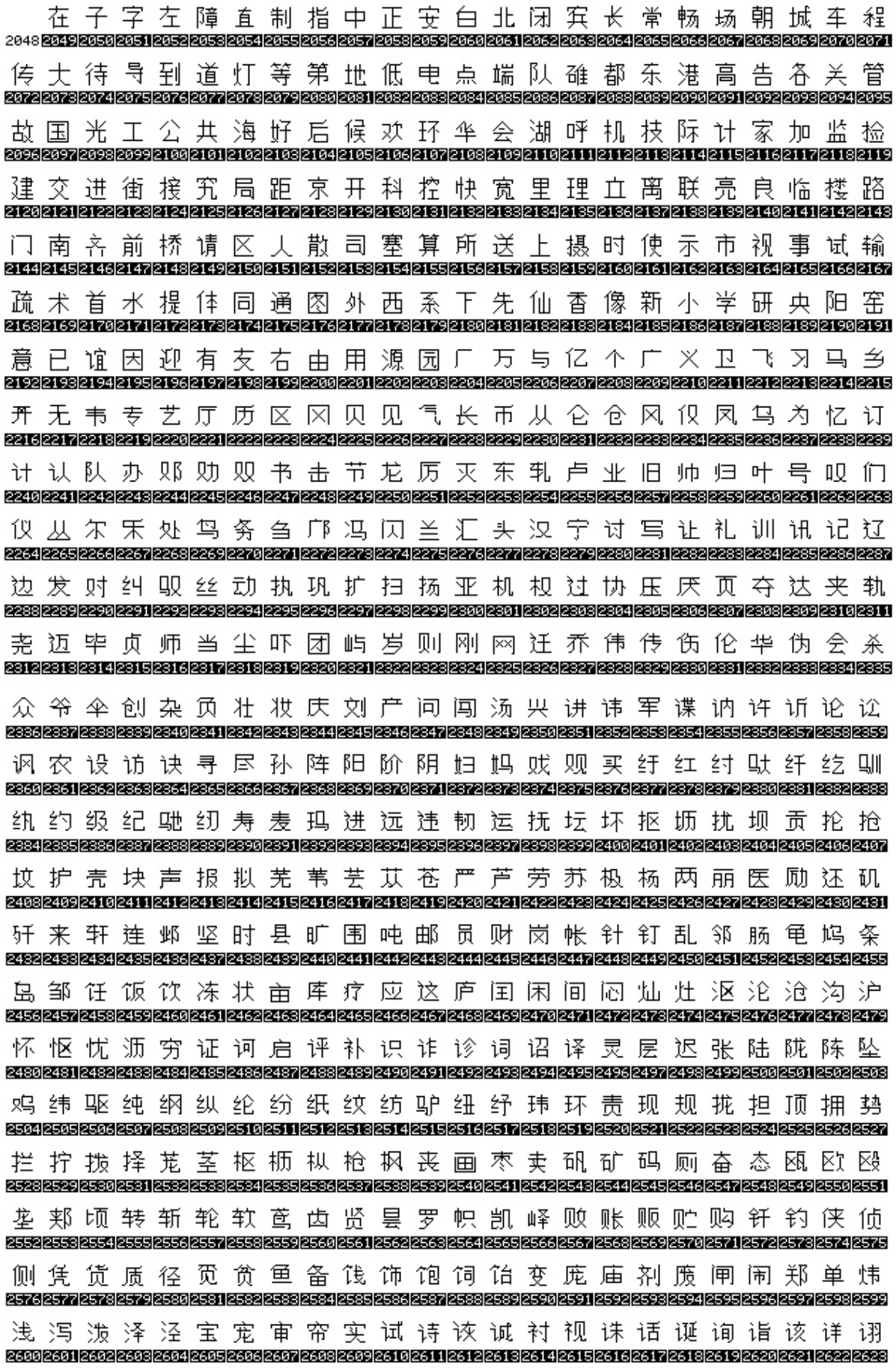
† ‡ § - – № ‹ › « » ´ ` ˘ ¨ а б в г д е ё ж з и
1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919

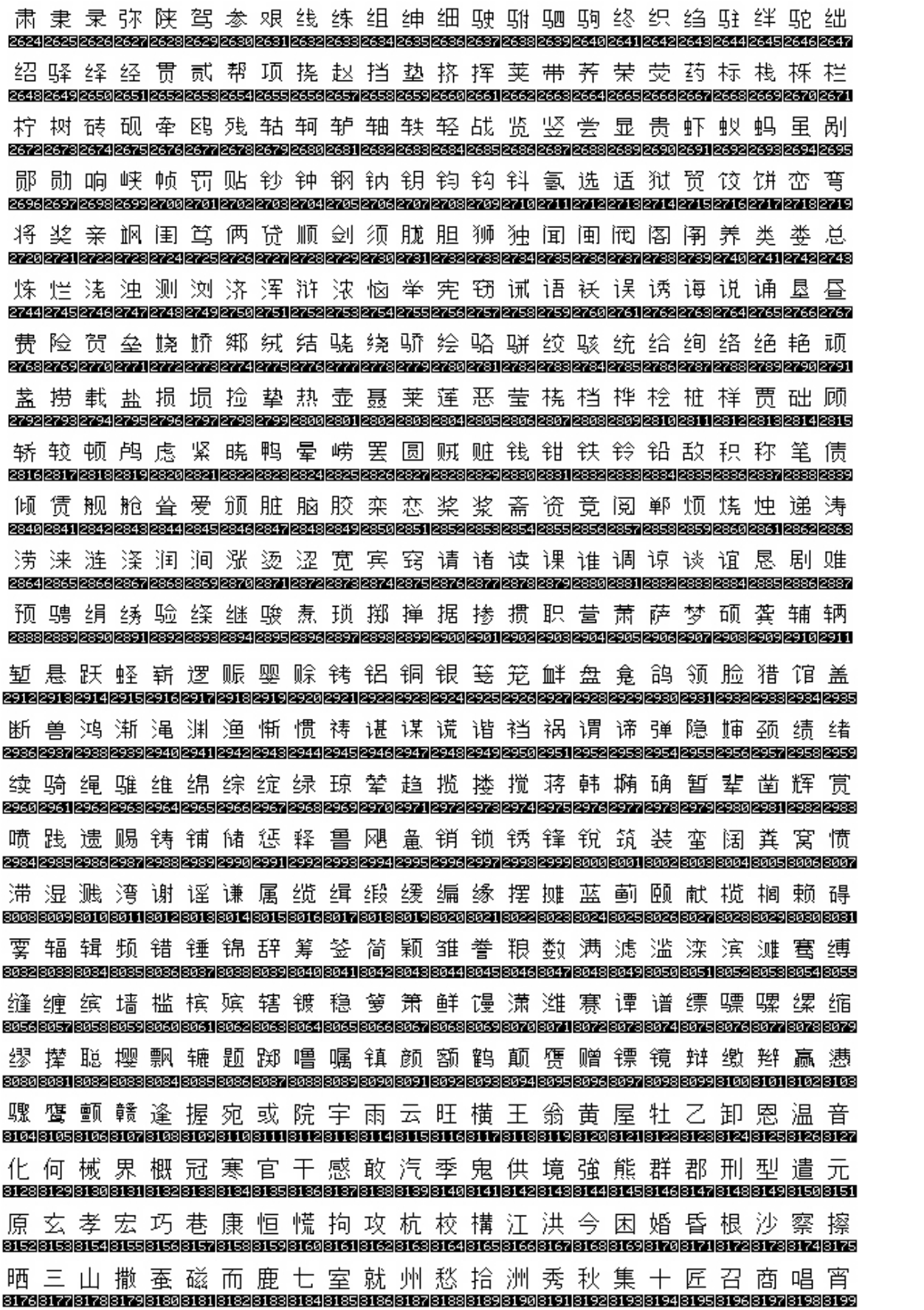
й к л м н о п р с т у ф х ц ч ш щ ъ ы ь э ю я є
1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943

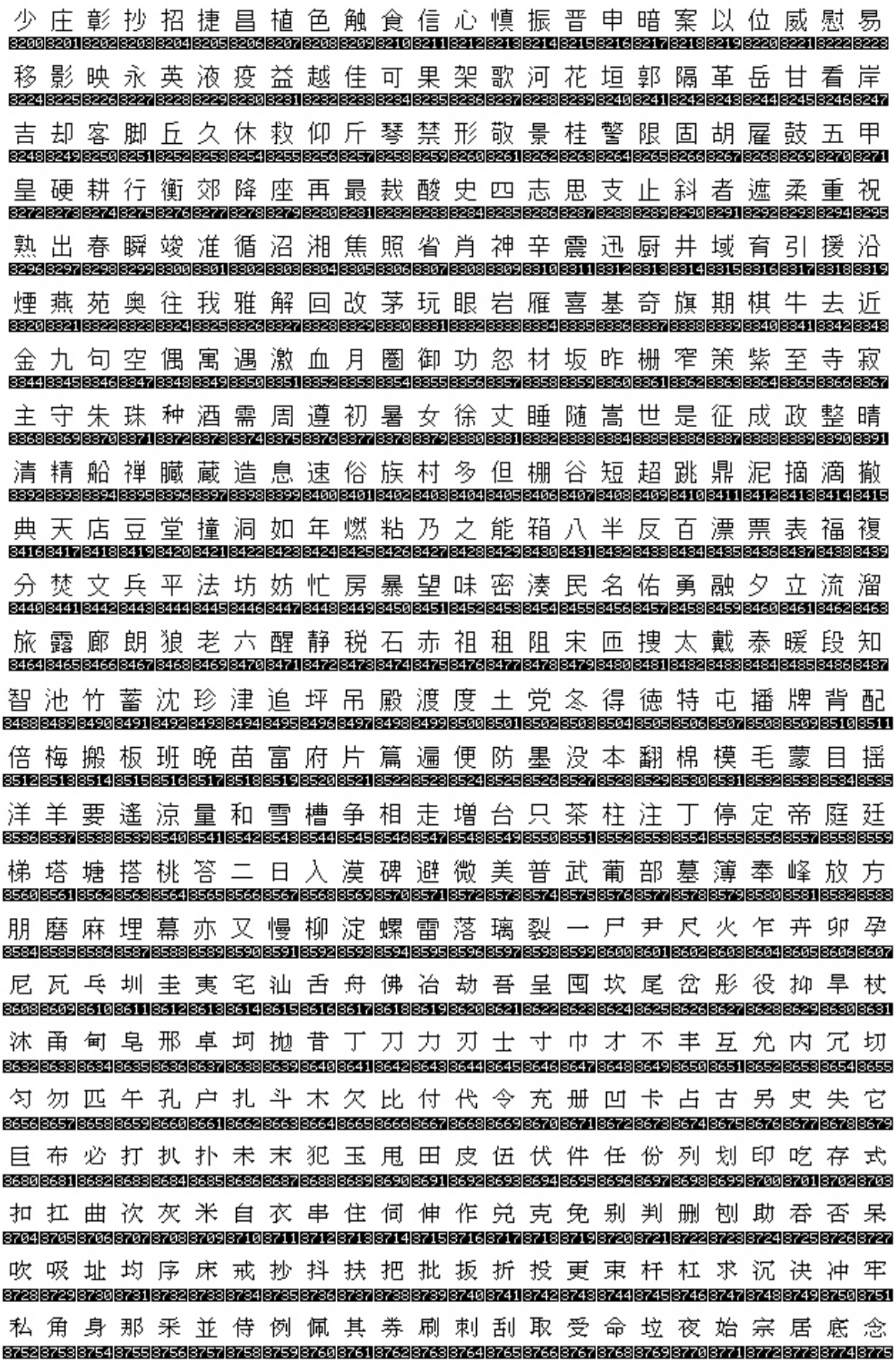
ї і ґ ђ ћ џ ј љ њ ѕ ѓ ѓ ќ ќ ў ў
1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967

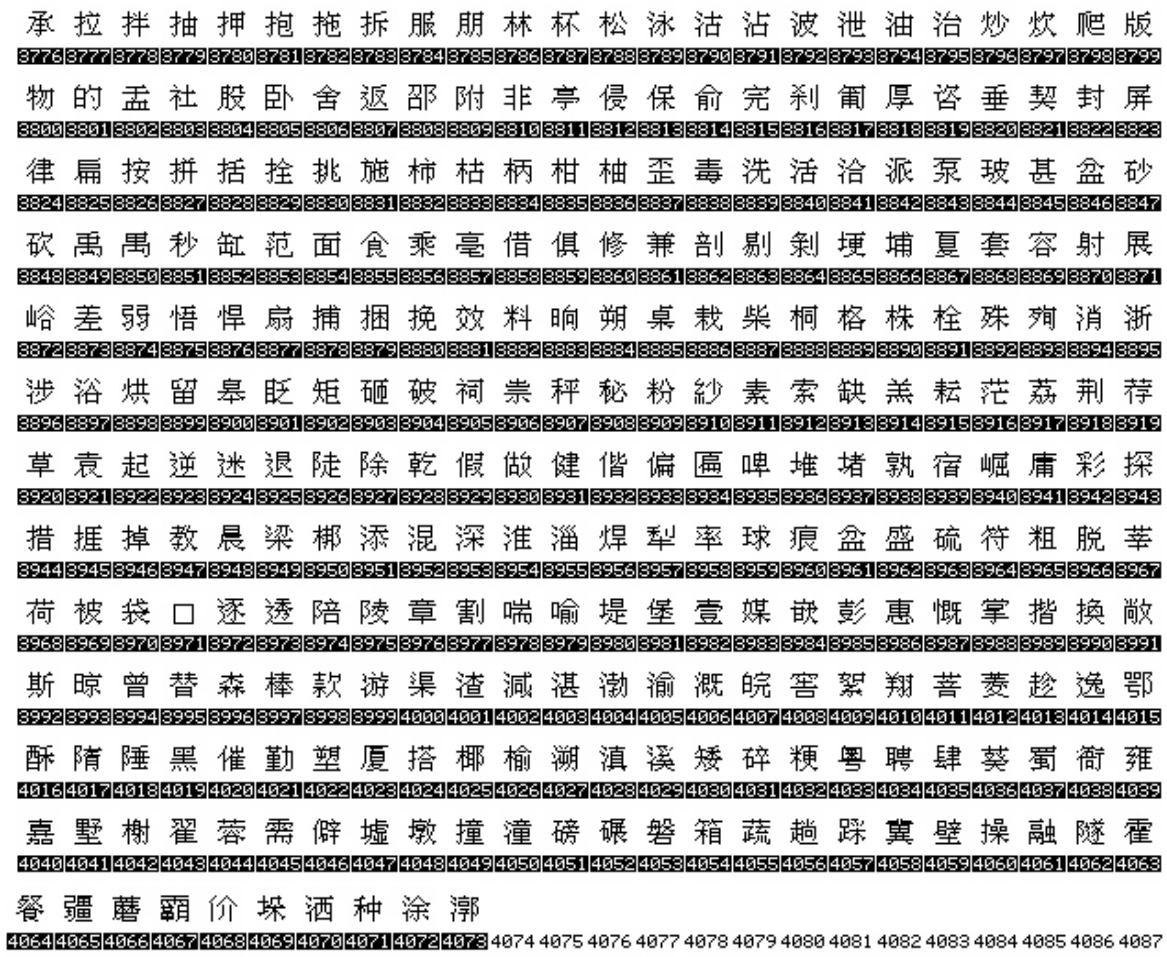
1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991

榜 蹭 抻 撑 囱 德 柜 截 裙 撕 澡 伫
1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015


在 子 字 左 障 直 制 指 中 正 安 白 北 闭 宾 长 常 畅 场 朝 城 车 程
2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071
传 大 待 导 到 道 灯 等 第 地 低 电 点 端 队 碓 都 东 港 高 告 各 关 管
2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095
故 国 光 工 公 共 海 好 后 候 欢 环 华 会 湖 呼 机 技 际 计 家 加 监 检
2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119
建 交 进 街 接 究 局 距 京 开 科 控 快 宽 里 理 立 离 联 亮 良 临 楼 路
2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143
门 南 齐 前 桥 请 区 人 散 司 塞 算 所 送 上 摄 时 使 示 市 视 事 试 输
2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167
疏 术 首 水 提 伴 同 通 图 外 西 系 下 先 仙 香 像 新 小 学 研 央 阳 窑
2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191
意 已 谊 因 迎 有 友 右 由 用 源 园 厂 万 与 亿 个 广 义 卫 飞 习 马 乡
2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215
开 无 韦 专 艺 厅 历 区 冈 贝 见 气 长 币 从 仑 仓 风 仅 凤 乌 为 忆 订
2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239
计 认 队 办 邓 劝 双 书 击 节 龙 历 灭 东 轧 卢 业 旧 帅 归 叶 号 叹 们
2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263
仪 丛 尔 乐 处 鸟 务 当 邝 冯 闪 兰 汇 头 汉 宁 讨 写 让 礼 训 讯 记 辽
2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287
边 发 对 纠 驭 丝 动 执 巩 扩 扫 扬 亚 机 权 过 协 压 厌 页 夺 达 夹 轨
2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311
老 迈 毕 贞 师 当 尘 吓 团 屿 岁 则 刚 网 迁 乔 伟 传 伤 伦 华 伪 会 杀
2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335
众 爷 伞 创 杂 负 壮 妆 庆 刘 产 问 闯 汤 兴 讲 讳 军 谍 讷 许 讶 论 讼
2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359
讽 农 设 访 诀 寻 尽 孙 阵 阳 阶 阴 妇 妈 戏 观 买 纡 红 纣 驮 纤 纥 驯
2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383
纫 约 级 纪 驰 纫 寿 麦 玛 进 远 违 韧 运 抚 坛 坏 抠 妨 抗 坝 贡 抡 抢
2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407
坟 护 壳 块 声 报 拟 芜 苇 芸 苁 苍 严 芦 劳 苏 极 杨 两 丽 医 励 还 矶
2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431
轩 来 轩 连 邺 坚 时 县 旷 围 吨 邮 员 财 岗 帐 针 钉 乱 邻 肠 龟 妈 条
2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455
岛 邹 任 饭 饮 冻 状 亩 库 疗 应 这 庐 闰 闲 间 闷 灿 灶 沤 沦 沧 沟 沪
2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479
怀 怄 忧 沥 穷 证 诃 启 评 补 识 诈 诊 词 诏 译 灵 层 迟 张 陆 陇 陈 坠
2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503
鸡 纬 驱 纯 纲 纵 纶 纷 纸 纹 纺 驴 纽 纾 玮 环 责 现 规 拢 担 顶 拥 势
2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527
拦 拧 拨 择 茏 茎 枢 栅 拟 枪 枫 丧 画 枣 卖 矾 矿 码 厕 奋 态 欧 欧 殴
2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551
垄 郑 顷 转 斩 轮 软 鸢 齿 贤 昙 罗 帜 凯 峄 败 账 贩 贮 购 钎 钓 侠 侦
2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575
侧 凭 货 质 径 觅 贫 鱼 备 饯 饰 饱 饲 饴 变 庞 庙 剂 废 闸 闹 郑 单 炜
2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599
浅 泻 泼 泽 泾 宝 宠 审 帘 实 试 诗 诙 诚 衬 视 诛 话 诞 询 诣 该 详 诩
2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623


肃 隶 录 弥 陕 驾 参 艰 线 练 组 绅 细 驶 驰 驱 驹 终 织 绉 驻 绊 驼 绌
2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647
绍 驿 绎 经 贯 贰 帮 项 挠 赵 挡 垫 挤 挥 荚 带 荞 荣 荧 药 标 栈 栎 栏
2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671
柠 树 砖 砚 牵 鸥 残 轱 轲 轳 轴 轶 轻 战 览 竖 尝 显 贵 虾 蚁 蚂 虽 剐
2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695
鄙 勋 响 峡 帧 罚 贴 钞 钟 钢 钠 钥 钧 钩 斜 氢 选 适 狱 贸 饺 饼 恋 弯
2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719
将 桨 亲 讽 闺 笃 俩 贷 顺 剑 须 胧 胆 狮 独 闻 闽 阀 阁 阐 养 类 娄 总
2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743
炼 烂 浇 浊 测 浏 济 浑 浒 浓 恼 举 宪 钥 试 语 袄 误 诱 诲 说 诵 垦 昼
2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766 2767
费 险 贺 垒 娆 娇 娜 绒 结 骁 绕 骄 绘 骆 骈 绞 骇 统 给 绚 络 绝 艳 顽
2768 2769 2770 2771 2772 2773 2774 2775 2776 2777 2778 2779 2780 2781 2782 2783 2784 2785 2786 2787 2788 2789 2790 2791
盖 捞 载 盐 损 埙 捡 挚 热 壶 聂 莱 莲 恶 莹 栈 档 桦 栓 桩 样 贾 础 顾
2792 2793 2794 2795 2796 2797 2798 2799 2800 2801 2802 2803 2804 2805 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815
轿 较 顿 鸬 虑 紧 晓 鸭 晕 唠 罢 圆 贼 赃 钱 钳 铁 铃 铅 敌 积 称 笔 债
2816 2817 2818 2819 2820 2821 2822 2823 2824 2825 2826 2827 2828 2829 2830 2831 2832 2833 2834 2835 2836 2837 2838 2839
倾 赁 舰 舱 耸 爱 颁 脏 脑 胶 亵 恋 桨 浆 斋 资 竞 阅 鄂 烦 炼 虫 递 涛
2840 2841 2842 2843 2844 2845 2846 2847 2848 2849 2850 2851 2852 2853 2854 2855 2856 2857 2858 2859 2860 2861 2862 2863
涝 涞 涟 涤 润 涧 涨 逊 涩 宽 宾 窍 请 诸 读 课 谁 调 谅 谈 谊 恳 剧 难
2864 2865 2866 2867 2868 2869 2870 2871 2872 2873 2874 2875 2876 2877 2878 2879 2880 2881 2882 2883 2884 2885 2886 2887
预 骋 绢 绣 验 绥 继 骏 熹 顼 掷 掸 据 掺 掼 职 堂 萧 萨 梦 硕 粪 辅 辆
2888 2889 2890 2891 2892 2893 2894 2895 2896 2897 2898 2899 2900 2901 2902 2903 2904 2905 2906 2907 2908 2909 2910 2911
堑 悬 跃 蛏 崭 逻 赈 婴 赊 铐 铝 铜 银 笺 笼 鲜 盘 龛 鸽 领 脸 猎 馆 盖
2912 2913 2914 2915 2916 2917 2918 2919 2920 2921 2922 2923 2924 2925 2926 2927 2928 2929 2930 2931 2932 2933 2934 2935
断 兽 鸿 渐 渑 渊 渔 惭 惯 祷 谌 谋 谎 谐 裆 祸 谓 谛 弹 隐 婶 颈 绩 绪
2936 2937 2938 2939 2940 2941 2942 2943 2944 2945 2946 2947 2948 2949 2950 2951 2952 2953 2954 2955 2956 2957 2958 2959
续 骑 绳 骓 维 绵 综 绽 绿 琼 辇 趋 揽 搂 揽 蒋 韩 撕 确 暂 辈 凿 辉 赏
2960 2961 2962 2963 2964 2965 2966 2967 2968 2969 2970 2971 2972 2973 2974 2975 2976 2977 2978 2979 2980 2981 2982 2983
喷 践 遗 赐 铸 铺 储 惩 释 晋 飓 龟 销 锁 锈 锋 锐 筑 装 蛮 阔 粪 窝 愤
2984 2985 2986 2987 2988 2989 2990 2991 2992 2993 2994 2995 2996 2997 2998 2999 3000 3001 3002 3003 3004 3005 3006 3007
滞 湿 溅 湾 谢 谣 谦 属 缆 缉 缎 缓 编 缘 摆 摊 蓝 蓟 颐 献 揽 橱 赖 碍
3008 3009 3010 3011 3012 3013 3014 3015 3016 3017 3018 3019 3020 3021 3022 3023 3024 3025 3026 3027 3028 3029 3030 3031
雾 辐 辑 频 错 锤 锦 辞 筹 签 简 颖 雏 誊 粮 数 满 滤 滥 滦 滨 滩 骞 缚
3032 3033 3034 3035 3036 3037 3038 3039 3040 3041 3042 3043 3044 3045 3046 3047 3048 3049 3050 3051 3052 3053 3054 3055
缝 缠 缤 墙 槛 槟 殡 辖 镀 稳 箩 箫 鲜 馒 潇 潍 赛 谭 谱 缥 嘌 骤 缧 缩
3056 3057 3058 3059 3060 3061 3062 3063 3064 3065 3066 3067 3068 3069 3070 3071 3072 3073 3074 3075 3076 3077 3078 3079
缪 撵 聪 樱 飘 辘 题 踯 唱 嘱 镇 颜 额 鹤 颠 赝 赠 镖 镜 辩 缴 辫 赢 懑
3080 3081 3082 3083 3084 3085 3086 3087 3088 3089 3090 3091 3092 3093 3094 3095 3096 3097 3098 3099 3100 3101 3102 3103
骤 戆 颤 赣 逢 握 宛 或 院 宇 雨 云 旺 横 王 翁 黄 屋 牡 乙 卸 恩 温 音
3104 3105 3106 3107 3108 3109 3110 3111 3112 3113 3114 3115 3116 3117 3118 3119 3120 3121 3122 3123 3124 3125 3126 3127
化 何 械 界 概 冠 寒 官 干 感 敢 汽 季 鬼 供 境 强 熊 群 郡 刑 型 遣 元
3128 3129 3130 3131 3132 3133 3134 3135 3136 3137 3138 3139 3140 3141 3142 3143 3144 3145 3146 3147 3148 3149 3150 3151
原 玄 孝 宏 巧 巷 康 恒 慌 拘 攻 杭 校 构 江 洪 今 困 婚 昏 根 沙 察 擦
3152 3153 3154 3155 3156 3157 3158 3159 3160 3161 3162 3163 3164 3165 3166 3167 3168 3169 3170 3171 3172 3173 3174 3175
晒 三 山 撒 蚕 磁 而 鹿 七 室 就 州 愁 拾 洲 秀 秋 集 十 匠 召 商 唱 宵
3176 3177 3178 3179 3180 3181 3182 3183 3184 3185 3186 3187 3188 3189 3190 3191 3192 3193 3194 3195 3196 3197 3198 3199


少 庄 彰 抄 招 捷 昌 植 色 触 食 信 心 慎 振 晋 申 暗 案 以 位 威 慰 易
8200 8201 8202 8203 8204 8205 8206 8207 8208 8209 8210 8211 8212 8213 8214 8215 8216 8217 8218 8219 8220 8221 8222 8223
移 影 映 永 英 液 疫 益 越 佳 可 果 架 歌 河 花 垣 郭 隔 革 岳 甘 看 岸
8224 8225 8226 8227 8228 8229 8230 8231 8232 8233 8234 8235 8236 8237 8238 8239 8240 8241 8242 8243 8244 8245 8246 8247
吉 却 客 脚 丘 久 休 救 仰 斤 琴 禁 形 敬 景 桂 警 限 固 胡 雇 鼓 五 甲
8248 8249 8250 8251 8252 8253 8254 8255 8256 8257 8258 8259 8260 8261 8262 8263 8264 8265 8266 8267 8268 8269 8270 8271
皇 硬 耕 行 衡 郊 降 座 再 最 裁 酸 史 四 志 思 支 止 斜 者 遮 柔 重 祝
8272 8273 8274 8275 8276 8277 8278 8279 8280 8281 8282 8283 8284 8285 8286 8287 8288 8289 8290 8291 8292 8293 8294 8295
熟 出 春 瞬 竣 准 循 沼 湘 焦 照 省 肖 神 辛 震 迅 厨 井 域 育 引 援 沿
8296 8297 8298 8299 8300 8301 8302 8303 8304 8305 8306 8307 8308 8309 8310 8311 8312 8313 8314 8315 8316 8317 8318 8319
煙 燕 苑 奥 往 我 雅 解 回 改 茅 玩 眼 岩 雁 喜 基 奇 旗 期 棋 牛 去 近
8320 8321 8322 8323 8324 8325 8326 8327 8328 8329 8330 8331 8332 8333 8334 8335 8336 8337 8338 8339 8340 8341 8342 8343
金 九 句 空 偶 寓 遇 激 血 月 圏 御 功 忽 材 坂 昨 栅 窄 策 紫 至 寺 寂
8344 8345 8346 8347 8348 8349 8350 8351 8352 8353 8354 8355 8356 8357 8358 8359 8360 8361 8362 8363 8364 8365 8366 8367
主 守 朱 珠 种 酒 需 周 遵 初 暑 女 徐 丈 睡 随 嵩 世 是 征 成 政 整 晴
8368 8369 8370 8371 8372 8373 8374 8375 8376 8377 8378 8379 8380 8381 8382 8383 8384 8385 8386 8387 8388 8389 8390 8391
清 精 船 禅 臓 蔵 造 息 速 俗 族 村 多 但 棚 谷 短 超 跳 鼎 泥 摘 滴 撤
8392 8393 8394 8395 8396 8397 8398 8399 8400 8401 8402 8403 8404 8405 8406 8407 8408 8409 8410 8411 8412 8413 8414 8415
典 天 店 豆 堂 撞 洞 如 年 燃 粘 乃 之 能 箱 八 半 反 百 漂 票 表 福 複
8416 8417 8418 8419 8420 8421 8422 8423 8424 8425 8426 8427 8428 8429 8430 8431 8432 8433 8434 8435 8436 8437 8438 8439
分 焚 文 兵 平 法 坊 妨 忙 房 暴 望 味 密 湊 民 名 佑 勇 融 夕 立 流 溜
8440 8441 8442 8443 8444 8445 8446 8447 8448 8449 8450 8451 8452 8453 8454 8455 8456 8457 8458 8459 8460 8461 8462 8463
旅 露 廊 朗 狼 老 六 醒 静 税 石 赤 祖 租 阻 宋 匝 捜 太 戴 泰 暖 段 知
8464 8465 8466 8467 8468 8469 8470 8471 8472 8473 8474 8475 8476 8477 8478 8479 8480 8481 8482 8483 8484 8485 8486 8487
智 池 竹 蓄 沈 珍 津 追 坪 吊 殿 渡 度 土 党 冬 得 徳 特 屯 播 牌 背 配
8488 8489 8490 8491 8492 8493 8494 8495 8496 8497 8498 8499 8500 8501 8502 8503 8504 8505 8506 8507 8508 8509 8510 8511
倍 梅 搬 板 班 晩 苗 富 府 片 篇 遍 便 防 墨 没 本 翻 棉 模 毛 蒙 目 揺
8512 8513 8514 8515 8516 8517 8518 8519 8520 8521 8522 8523 8524 8525 8526 8527 8528 8529 8530 8531 8532 8533 8534 8535
洋 羊 要 遙 涼 量 和 雪 槽 争 相 走 増 台 只 茶 柱 注 丁 停 定 帝 庭 廷
8536 8537 8538 8539 8540 8541 8542 8543 8544 8545 8546 8547 8548 8549 8550 8551 8552 8553 8554 8555 8556 8557 8558 8559
梯 塔 塘 搭 桃 答 二 日 入 漠 碑 避 微 美 普 武 葡 部 墓 簿 奉 峰 放 方
8560 8561 8562 8563 8564 8565 8566 8567 8568 8569 8570 8571 8572 8573 8574 8575 8576 8577 8578 8579 8580 8581 8582 8583
朋 磨 麻 埋 幕 亦 又 慢 柳 淀 螺 雷 落 璃 裂 一 尸 尹 尺 火 乍 并 卯 孕
8584 8585 8586 8587 8588 8589 8590 8591 8592 8593 8594 8595 8596 8597 8598 8599 8600 8601 8602 8603 8604 8605 8606 8607
尼 瓦 乓 圳 圭 夷 宅 汕 舌 舟 佛 冶 劫 吾 呈 囤 坎 尾 岔 彤 役 抑 旱 杖
8608 8609 8610 8611 8612 8613 8614 8615 8616 8617 8618 8619 8620 8621 8622 8623 8624 8625 8626 8627 8628 8629 8630 8631
沐 甬 甸 皂 邢 卓 坷 拋 昔 丁 刀 力 刃 士 寸 巾 才 不 丰 互 允 内 冗 切
8632 8633 8634 8635 8636 8637 8638 8639 8640 8641 8642 8643 8644 8645 8646 8647 8648 8649 8650 8651 8652 8653 8654 8655
匀 勿 匹 午 孔 户 扎 斗 木 欠 比 付 代 令 充 册 凹 卡 占 古 另 史 失 它
8656 8657 8658 8659 8660 8661 8662 8663 8664 8665 8666 8667 8668 8669 8670 8671 8672 8673 8674 8675 8676 8677 8678 8679
巨 布 必 打 扒 扑 未 末 犯 玉 甩 田 皮 伍 伏 件 任 份 列 划 印 吃 存 式
8680 8681 8682 8683 8684 8685 8686 8687 8688 8689 8690 8691 8692 8693 8694 8695 8696 8697 8698 8699 8700 8701 8702 8703
扣 扛 曲 次 灰 米 自 衣 串 住 伺 伸 作 兌 克 免 別 判 删 刨 助 吞 否 呆
8704 8705 8706 8707 8708 8709 8710 8711 8712 8713 8714 8715 8716 8717 8718 8719 8720 8721 8722 8723 8724 8725 8726 8727
吹 吸 址 均 序 床 戒 抄 抖 扶 把 批 扳 折 投 更 束 杆 杠 求 沉 決 沖 牢
8728 8729 8730 8731 8732 8733 8734 8735 8736 8737 8738 8739 8740 8741 8742 8743 8744 8745 8746 8747 8748 8749 8750 8751
私 角 身 那 釆 並 侍 例 佩 其 券 刷 刺 刮 取 受 命 垃 夜 始 宗 居 底 念
8752 8753 8754 8755 8756 8757 8758 8759 8760 8761 8762 8763 8764 8765 8766 8767 8768 8769 8770 8771 8772 8773 8774 8775


承 拉 拌 抽 押 抱 拖 拆 服 朋 林 杯 松 泳 沽 沾 波 泄 油 治 炒 炊 爬 版
3776 3777 3778 3779 3780 3781 3782 3783 3784 3785 3786 3787 3788 3789 3790 3791 3792 3793 3794 3795 3796 3797 3798 3799
物 的 盂 社 股 卧 舍 返 邵 附 非 亭 侵 保 俞 完 刹 匍 厚 咨 垂 契 封 屏
3800 3801 3802 3803 3804 3805 3806 3807 3808 3809 3810 3811 3812 3813 3814 3815 3816 3817 3818 3819 3820 3821 3822 3823
律 扁 按 拼 括 拴 挑 施 柿 枯 柄 柑 柚 歪 毒 洗 活 洽 派 泵 玻 甚 盆 砂
3824 3825 3826 3827 3828 3829 3830 3831 3832 3833 3834 3835 3836 3837 3838 3839 3840 3841 3842 3843 3844 3845 3846 3847
砍 禹 禺 秒 缸 范 面 食 乘 毫 借 俱 修 兼 剖 剔 剩 埂 埔 夏 套 容 射 展
3848 3849 3850 3851 3852 3853 3854 3855 3856 3857 3858 3859 3860 3861 3862 3863 3864 3865 3866 3867 3868 3869 3870 3871
峪 差 弱 悟 悍 扇 捕 捆 挽 效 料 晌 朔 桌 栽 柴 桐 格 株 栓 殊 殉 消 浙
3872 3873 3874 3875 3876 3877 3878 3879 3880 3881 3882 3883 3884 3885 3886 3887 3888 3889 3890 3891 3892 3893 3894 3895
涉 浴 烘 留 皋 眨 矩 砸 破 祠 祟 秤 秘 粉 紗 素 索 缺 羔 耘 茫 荔 荆 荐
3896 3897 3898 3899 3900 3901 3902 3903 3904 3905 3906 3907 3908 3909 3910 3911 3912 3913 3914 3915 3916 3917 3918 3919
草 袁 起 逆 迷 退 陡 除 乾 假 做 健 偕 偏 區 啤 堆 堵 孰 宿 崛 庸 彩 探
3920 3921 3922 3923 3924 3925 3926 3927 3928 3929 3930 3931 3932 3933 3934 3935 3936 3937 3938 3939 3940 3941 3942 3943
措 捱 掉 教 晨 梁 椰 添 混 深 淮 淄 焊 犁 率 球 痕 盆 盛 硫 符 粗 脱 苹
3944 3945 3946 3947 3948 3949 3950 3951 3952 3953 3954 3955 3956 3957 3958 3959 3960 3961 3962 3963 3964 3965 3966 3967
荷 被 袋 口 逐 透 陪 陵 章 割 喘 喻 堤 堡 壹 媒 嵌 彭 惠 慨 掌 揩 换 敞
3968 3969 3970 3971 3972 3973 3974 3975 3976 3977 3978 3979 3980 3981 3982 3983 3984 3985 3986 3987 3988 3989 3990 3991
斯 晾 曾 替 森 棒 款 游 渠 渣 减 湛 渤 渝 溉 皖 害 絮 翔 菩 萎 趁 逸 鄂
3992 3993 3994 3995 3996 3997 3998 3999 4000 4001 4002 4003 4004 4005 4006 4007 4008 4009 4010 4011 4012 4013 4014 4015
酥 隋 陲 黑 催 勤 塑 厦 搭 椰 榆 溯 滇 溪 矮 碎 粳 粤 聘 肆 葵 蜀 衙 雍
4016 4017 4018 4019 4020 4021 4022 4023 4024 4025 4026 4027 4028 4029 4030 4031 4032 4033 4034 4035 4036 4037 4038 4039
嘉 墅 榭 翟 蓉 需 僻 墟 墩 撞 潼 磅 碾 磐 箱 蔬 趟 踩 冀 壁 操 融 隧 霍
4040 4041 4042 4043 4044 4045 4046 4047 4048 4049 4050 4051 4052 4053 4054 4055 4056 4057 4058 4059 4060 4061 4062 4063
餐 疆 蘑 霸 价 垛 洒 种 涂 渺
4064 4065 4066 4067 4068 4069 4070 4071 4072 4073 4074 4075 4076 4077 4078 4079 4080 4081 4082 4083 4084 4085 4086 4087

9 ERROR MESSAGES

Error	Description
Error 01 - Invalid camera request	The camera number entered from the keyboard does not exist. If using the LTC 8059/00 MCS or the LTC 8850/00 GUI software, ensure that the number exists in the Camera Identification table. Download the table to be sure.
Error 02 - Invalid monitor request	The monitor number entered from the keyboard does not exist. Enter a valid monitor number.
Error 03 - Locked remote device	The remote device requested cannot be controlled because it is locked by a user with equal or higher priority. Check with the other users or request that a higher priority user unlock the remote device.
Error 04 - Monitor locked	The monitor requested cannot be accessed because it is locked by a user with equal or higher priority. Check with the other users or request that a higher priority user unlock the monitor.
Error 05 - Remote device access restricted	Remote is locked out by Remote Lock Out table.
Error 06 - Monitor access restricted	Monitor is locked out by Monitor Lock Out Table.
Error 10 - Access denied	A function was requested that requires a higher user priority. Only a priority 2 user or a supervisor with priority 1 may access this function.
Error 11 - Access denied	A function was requested for which your user priority is too low. Only a supervisor with priority 1 may access this function.
Error 15 - Invalid user function	The function number requested from the keyboard is invalid. Refer to the *User Function* table for a listing of the valid user function numbers.
Error 20 - Acknowledge denied	**ACKNOWLEDGE** has been pressed by a user without authority to acknowledge alarms.
Error 21 - Incorrect acknowledge	To properly acknowledge an alarm event, the keyboard must be switched to a monitor that is displaying the alarms.
Error 22 - Acknowledge disabled	Alarms on this monitor cannot be acknowledged because that capability has been disabled by the system programmer.
Error 23 - Camera not in alarm	The camera displayed on the monitor is not an alarm video; only alarm-generated video can be acknowledged.
Error 24 - Keyboard not enabled for acknowledge	This keyboard may not acknowledge alarm video on this monitor; it has been disabled by the system programmer.
Error 25 - Alarm switcher running	Alarm video may only be acknowledged if the alarm switcher is not running; press **HOLD** to stop the switcher.
Error 50 - SEQUENCE not available	The user tried to load a switcher sequence that does not exist. This is a good way to tell from the keyboard, which sequence numbers are unused when desiring to add one.
Error 51 - SEQUENCE not available	A request was made to load an ABSOLUTE sequence without the keyboard being on one of the monitors in that sequence. Because inadvertent loading of monitors should be avoided, the user is required to switch his keyboard to one of the monitors used by the sequence. The *PROGRAM* mode may be used to review which monitors are used in the sequence.
Error 52 - SEQUENCE request	A request was made to load a RELATIVE sequence on a monitor number that is too high. The monitors used by the sequence would extend past the highest monitor. Try switching to a lower monitor number before loading the sequence.
Error 53 - Switcher empty	The user has tried to control a sequence using **NEXT**, **PREV**, **RUN**, or **HOLD** without a sequence having been loaded.

Error	Description
Error 55 - SEQUENCE priority	The switcher sequence being requested or cleared requires monitors that are in use by a user of equal or higher priority. Contact a user with higher priority, or have the system administrator clear the monitors in question.
Error 56 - SEQUENCE request	The user has tried to load a sequence that is being edited in the *PROGRAM* mode. Once editing has been completed, the sequence may be loaded.
Error 58 - SEQUENCE request	The sequence being requested is a Relative sequence, and the user is only permitted access to Absolute sequences.
Error 60 - PROGRAM request	The user has tried to program a sequence that is currently running. The sequence must first be stopped before any editing can be performed.
Error 62 - PROGRAM request	The user has tried to program a new sequence when the system is out of sequence memory space. Delete unused sequences and then program the new sequence.
Error 63 - PROGRAM request	Some other user is already programming a sequence on this monitor.
Error 70 - Monitor not allocated to alarm monitor group	This monitor cannot be used for alarm operations; it has not been designated as alarm-capable by the system programmer.
Error 71 - Step monitor required	A group of alarm monitors may not have an armed Review (display) monitor without having armed Step (sequence) monitors.
Error 78 - Must enter alarm number	A specific alarm number must be entered when arming or disarming an alarm.

Error	Description
Error 80 - Trunk not available	An attempt was made to access a remote camera connected to a satellite system, but no unused trunk lines are currently available.
Error 81 - Satellite Trunk Seized	The camera currently viewed has changed because an operator with a higher priority has selected a different camera that seized the trunk line from the satellite.
Error 89 - Internal stack error	A stack overflow has occurred within the system. Report this to the manufacturer.
Error 90 - Keyboard entry undefined	The keyboard entry is not defined. Check the appropriate section of this manual for the desired operation, and try again.
Error 92 - Keyboard entry out of range	The data entered for a valid command was not in the permitted range. Check the appropriate section of this manual for the acceptable ranges for the command in question and try again.
Error 94 - Keyboard entry invalid	An invalid character has been received from the keyboard, usually caused by a communication error. Verify that the keyboard-to-system cable is securely connected.
Error 95 - Keyboard entry incomplete	The control sequence sent from the keyboard was incomplete, usually indicating a communication error. Verify that the keyboard-to-system cable is not producing an intermittent connection.
Error 96 - * (STAR) undefined	The ***** key has been pressed, but there is no definition for this button.
Warning Messages - Hi/Low Temperature Alert The Allegiant CPU is equipped with a temperature sensor. If the ambient CPU temperature drops below -10 degrees C or goes above +55 degrees C, an on-screen "Temperature Alert" message will appear on the system monitors and the system keyboards will begin to beep.	

10 GLOSSARY OF TERMS

Term	Definition
AUXILIARY	An auxiliary is an additional function of the remote receiver/driver, which permits on/off control of outputs available to the user. In the Allegiant system, four relay outputs are available, which can be configured for contact closures, 24VAC output, or LINE voltage output. Additionally, they can be set to activate either momentarily, or in a latching mode.
COMMAND SCRIPT	A unique feature of the Allegiant system wherein a section of nonvolatile memory can be used to store specialized factory programming. This program then provides custom features, not ordinarily obtainable.
DITHER	A receiver/driver feature providing added protection to very low light level cameras, by periodically panning a few degrees to the left and right automatically.
LOCKOUTS	Switcher/controller system ability to restrict access to certain system functions/features. The Allegiant system modes of lockout are: By operator level, allowing a higher priority level operator to lock out lower level operators from viewing or controlling specific cameras. By MCS setups to: 1. Restrict operators/keyboards from viewing/accessing any camera. 2. Restrict operators/keyboards from controlling/accessing any pan/tilt. 3. Restrict operators from using certain keyboards. 4. Restrict operators/keyboards from accessing certain monitors.
LOGON, LOGOFF	A selectable Allegiant feature requiring operators to enter a User number and optional password into the keyboard prior to access.
MATRIX SWITCHING	The ability of a switching system to display any camera on any monitor, or the same camera on all monitors.
PHASED CAMERAS	These are properly integrated cameras, giving a roll-free video display when switching from one camera to the next in a sequential switcher system. Phased cameras are the result of line-locked cameras powered from the same AC power, externally synchronized, or vertically phase adjusted on cameras equipped with this option.
PRE-POSITION	The ability to store the position of a pan/tilt/zoom lens, so that the desired scene can later be automatically recalled. With the Allegiant system, multiple preset scenes can be stored for each pan/tilt camera. For each scene, the pan, tilt, zoom, and focus settings are stored.
SalvoSwitching	The ability of the Allegiant system to switch multiple video monitors as a synchronized group. Since multiple monitors switch together, multiple scenes of an area or zone are viewable before switching to the next area.
SEQUENCE	A series of camera scenes that can be preprogrammed to switch automatically. The Allegiant system can store up to 60 sequences, each one capable of having random camera order, individual camera dwell times, and SalvoSwitching steps.
TIME EVENT	An Allegiant system feature (available with the LTC 8059/00 MCS for Windows or the LTC 8850/00 GUI software) enabling various system functions to periodically be activated automatically. Event functions (monitor message broadcasts, sequence and switching operations, receiver/driver actions, message printing, alarm settings, and execution of custom factory programming) can be stored in the system memory for execution at a predetermined time. The task can be specified to begin on a specific year, month, day, and time, and can repeat at intervals from every five minutes to yearly.
VERTICAL INTERVAL SWITCHING	Camera to camera video switching during the vertical blanking interval of the video signal. This minimizes visual switching disturbances such as rolling, jitter, video flashes, etc., and eliminates frame information loss when used with video tape machines.

Americas
Bosch Security Systems, Inc.
850 Greenfield Road
Lancaster, Pennsylvania 17601
USA
Telephone +1 888-289-0096
Fax +1 585-223-9180
Email: security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:
Bosch Security Systems Pte Ltd
38C Jalan Pemimpin
Singapore 577180
Phone: +65 6319 3450
Fax: +65 6319 3499
apr.securitysystems@bosch.com
www.boschsecurity.com

2009 Bosch Security Systems, Inc.
F01U127363 09-03 | Updated March 17, 2009 | Data subject to change without notice.

BOSCH